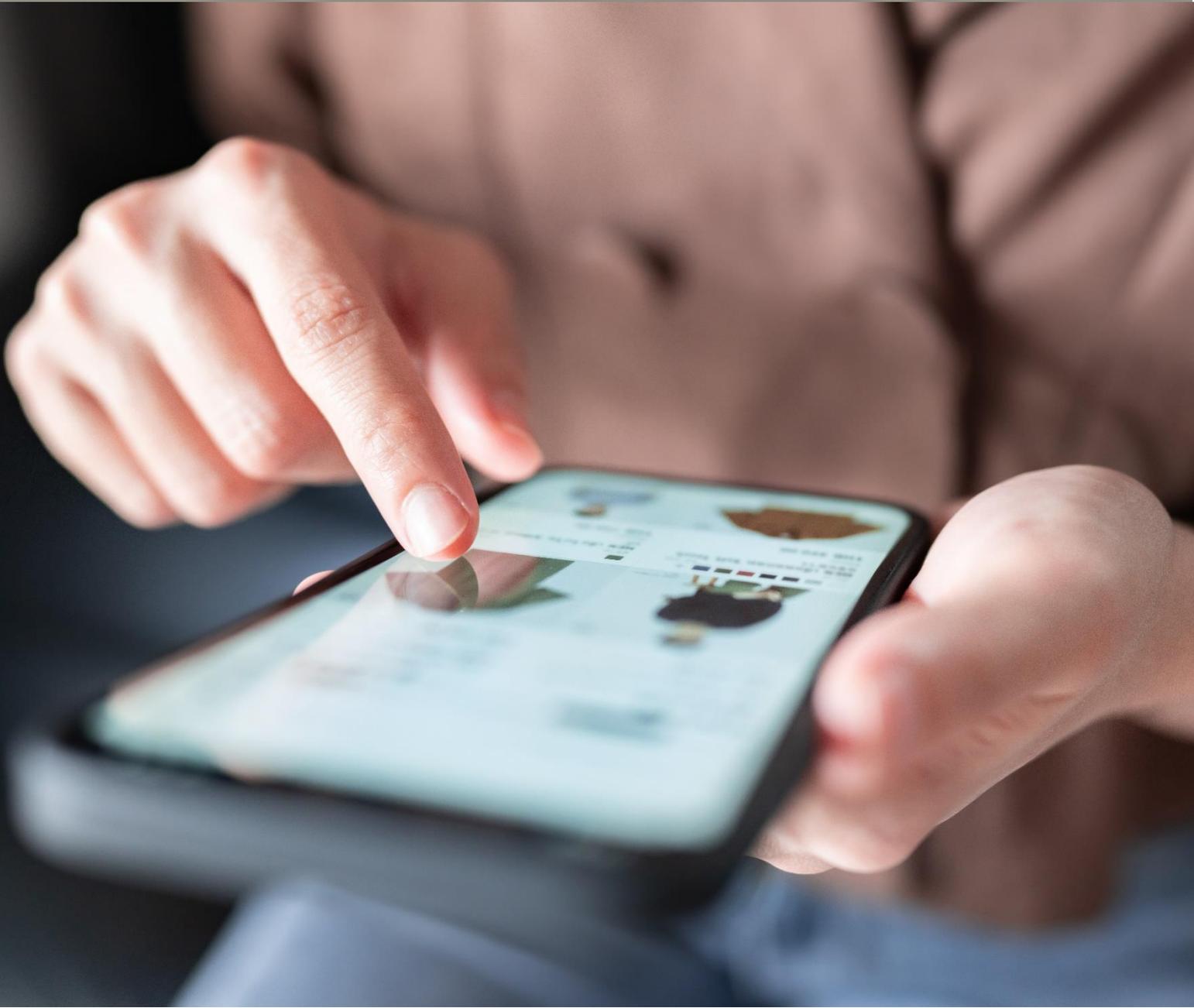


Common cost of capital input methodologies review (fibre and regulated suppliers under Part 4)

Draft decision reasons paper

10 March 2026



Associated documents

Publication date	Reference	Title
10 March 2026	ISBN 978-1-991414-70-0	Fibre Input Methodologies – Decision-making framework paper
10 March 2026		Review of cost of capital input methodologies (IMs) Explanatory Overview
10 March 2026	ISBN 978-1-991414-71-7	[DRAFT] Airport Services Input Methodologies (TAMRP methodology) Amendment Determination 2026
10 March 2026	ISBN 978-1-991414-72-4	[DRAFT] Electricity Distribution Services Input Methodologies (TAMRP methodology) Amendment Determination 2026
10 March 2026	ISBN 978-1-991414-73-1	[DRAFT] Fibre Input Methodologies (TAMRP methodology) Amendment Determination 2026
10 March 2026	ISBN 978-1-991414-74-8	[DRAFT] Gas Distribution Services Input Methodologies (TAMRP methodology) Amendment Determination 2026
10 March 2026	[SBN 978-1-991414-75-5	[DRAFT] Gas Transmission Services Input Methodologies (TAMRP methodology) Amendment Determination 2026
10 March 2026	ISBN 978-1-991414-76-2	[DRAFT] Transpower Input Methodologies (TAMRP methodology) Amendment Determination 2026
17 March 2026	ISBN 978-1-991414-77-9	[DRAFT] Fibre Input Methodologies (IM Review) Amendment Determination 2026
12 November 2025		Sapere Research Group (Glenn Boyle): The Commerce Commission’s Approach to Estimating the Tax-Adjusted Market Risk Premium as of 2025: Review and Evaluation
8 September 2025		Sapere Research Group (Glenn Boyle and Matthew Williamson): The New Zealand Commerce Commission’s Approach to Setting the Term of the Risk-Free Rate: Review and Evaluation
July 2025		Frontier Economics (Stephen Gray): Return on debt and risk-free rate
27 March 2025		Open letter on Fibre Input Methodologies Review
27 March 2025		Notice of Intention – Cost of Capital Review for Electricity Lines Services, Gas Pipeline Services, and Specified Airport Services
27 March 2025		Notice of Intention – Fibre Input Methodologies Review 2027
29 November 2022		CEPA Review of Cost of Capital 2022/2023. New Zealand Commerce Commission. Final report

Table of Contents

Associated documents	1
Executive summary	4
We have heard stakeholders’ concerns about price shocks	5
A trailing average approach would not better promote our objectives.....	8
Providing your views on this draft decision	9
Chapter 1 Review of the cost of capital input methodologies	12
Scope of the cost of capital review for both the Fibre and Part 4 regulatory regimes	12
Aligning the common WACC IM review timeframes	13
Decision-making framework - Fibre and the Part 4 regulatory regimes	14
What we are consulting on	15
Seeking submitter views on our draft decision	15
Chapter 2 Submission process	20
Chapter 3 Overview of cost of capital	22
Introduction to weighted average cost of capital	22
Introduction to cost of capital input methodology	23
Cost of debt.....	25
Cost of equity	26
Other WACC parameters	27
Other WACC issues	27
Introduction to real returns and our regime	27
Real returns.....	27
Our regime and approach to inflation.....	28
Chapter 4 Cost of debt – risk-free rate	29
The risk-free rate for the cost of debt.....	29
Maintaining a prevailing approach to the risk-free rate for the cost of debt.....	31
Alternatives considered	31
Summary of our draft decision	31
Approach to reaching our draft decision	33
Submissions from stakeholders	33
Expert report from Frontier Economics	36
Our consideration of the approach to setting the risk-free rate for the cost of debt	44
Maintaining the estimation window of three months.....	63
Aligning the term of the risk-free rate with the length of the regulatory period.....	64

Chapter 5	Other cost of debt issues	66
	The simple and complex approach to estimating the cost of debt	66
	Our approach to the debt premium	67
	Term Credit Spread Differential	70
	Debt issuance and associated costs.....	73
Chapter 6	Cost of equity.....	77
	Risk-free rate for the cost of equity.....	77
	Tax-adjusted Market Risk Premium	88
	Equity issuance costs.....	112
Chapter 7	Other weighted average cost of capital issues	114
	Tax rates	114
	Reasonableness checks.....	115
	Aligning the methodology of price-quality and information disclosure weighted average cost of capital determinations	118
	The split of issues under the tranching approach to the Input Methodologies Review	119
Chapter 8	Other matters raised	122
Attachment A: Glossary		130

Executive summary

- X1 The cost of capital is an important feature in economic regulation of monopolies. We want to ensure that regulated businesses invest sufficiently at the lowest reasonable cost to consumers, while recognising that there needs to be a reasonable rate of return for financing of that investment to be available. The rate of return needs to reflect the nature of the regulated sector and potential risks, as well as the relative certainty provided by independent economic regulation.
- X2 The cost of capital is the expected financial return investors require from an investment given its risk.
- X3 The revenues and prices we set are intended to allow regulated businesses to cover their expected efficient costs, including interest costs on debt and the reasonable profit expectations of investors for the equity capital they have invested. The weighted average cost of capital (**WACC**) is our estimate of the combined cost of interest rates on debt and required profitability on invested equity capital.
- X4 Many of the parameters used to estimate the WACC are common across the economy – they do not vary between sectors. For this reason, we have decided to do a single review of how we estimate them, and where appropriate, align the approaches. In Tranche 1 of this input methodologies review (IM Review), we reviewed these economy-wide parameters that apply to all the services we currently regulate: specified airport services, electricity lines, fibre fixed line access, and gas pipelines. We intend to continue this approach to reviewing the economy-wide parameters in the future.
- X5 We will review those parameters of the WACC that are specific to fibre in Tranche 2 of the Fibre IM Review. Specific parameters for other regulated sectors were reviewed in 2023; the next planned review of these parameters is due in 2030.
- X6 Our draft view is that the cost of capital IM is largely fit for purpose. The only change proposed in our draft decision relates to the tax-adjusted market risk premium (TAMRP), as part of the cost of equity. We are proposing changes to how it is estimated, specifying the methodology in the IMs, and to the timing of future updates. These changes can be characterised as simplifications and refinements to our historical approach, and had the draft new approach applied previously, there would have been little or no change to previous values.
- X7 In this paper, we explain why we consider that, on balance, the status quo better promotes the objectives of the IM review—which we must follow—compared to the alternatives.
- X8 However, we first discuss how the WACC relates to price shocks, since that was the focus of stakeholders' feedback.

We have heard stakeholders' concerns about price shocks

- X9 A major point of feedback from a wide group of stakeholders was that the Commission should change the method of setting the WACC to smooth price changes between resets by adopting a “trailing average” approach to setting the WACC. Therefore, this has been a key focus for our review.
- X10 We want to be very clear: we hear you. We understand that many stakeholders prefer to avoid large price shocks. So do we, where desirable for the long-term benefit of consumers.
- X11 We think that some stakeholders may have reached a view that a change of approach would deliver more price smoothing than is actually the case, which would come at the expense of increased complexity and transition costs for regulated suppliers.
- X12 To explain the effects of a ‘trailing average’ on revenue and price smoothing over time, we first explain how the trailing average relates to the WACC and then show the impact that a trailing average has on revenues over time.
- X13 First, this is how the trailing average relates to the WACC:
- X13.1 The WACC is comprised of two components: the cost of debt and the cost of equity. Each of these is (essentially) comprised of a risk-free rate plus a specific risk premium.
- X13.2 A trailing average approach means using a historical average of previous observations to estimate some part(s) of these costs.
- X13.3 A trailing average is a valid option only for the cost of debt; it is not used for the cost of equity because it needs to be forward looking to attract investors. This is not a controversial stance and is consistent with the purpose of regulation. This approach to the cost of equity is consistent with how comparable overseas regulators set this value.
- X13.4 For the cost of debt, we currently use a hybrid of: (1) current (recent) government bond rates to estimate the risk-free rate, and (2) a five-year trailing average to calculate the debt premium. Our approach is known as a hybrid approach to the cost of debt.
- X13.5 The most material change could therefore be to use a form of trailing average for the real risk-free rate for the cost of debt. However, we could also amend the length of the trailing average for the debt premium.

- X14 Second, the real risk-free rate component of the cost of debt tends to make up less than 10% of total costs, so differences between the current approach and a trailing average approach have very small differences on the revenue allowances we set. This reflects the following factors:
- X14.1 **Leverage:** The cost of debt contributes less than half the weighted average cost of capital. Leverage is between 23% and 41% depending on the sector. Therefore, the largest portion of step-changes in the risk-free rate at a price path reset is unaffected by the choice of approach to the risk-free rate for the cost of debt.
- X14.2 **Our approach to inflation:** The risk-free rate can be broken down into two parts: the real interest rate and inflation. Our regime provides suppliers the expectation of earning a normal real return on their investments. This means that the revenues we allow suppliers enables them to cover the real interest costs and expected inflation. We then insulate suppliers and consumers from the risk that outturn inflation differs from expectations – when inflation is higher than expected, prices increase more than expected, and vice versa when inflation is lower than expected.¹ Importantly, without changing the treatment of inflation within the regime (which would expose suppliers and consumers to inflation risk), prices would continue to reflect actual inflation under either approach. Adopting a trailing average would only smooth the ‘real’ component of the risk-free rate.
- X15 To illustrate the small impact the choice of approach makes, overall nominal revenues (prior to accounting for any wash-up drawdowns and incentive amounts) for Vector over the DPP3 and DPP4 period is largely unchanged in our modelling.
- X15.1 \$6.04 billion under the status quo;
- X15.2 \$6.00 billion under a five-year trailing average cost of debt (TACD); and
- X15.3 \$6.03 billion under a 10-year TACD.
- X16 Our current view is that, where smoothing revenues is both consistent with the statutory purpose and desirable to avoid price shocks, we have effective tools to smooth revenues at an aggregate level rather than focusing on individual components such as the risk-free rate for the cost of debt.²
- X17 For example, In the last round of electricity resets, we smoothed revenue significantly – we moderated distribution revenue between periods from an increase of up to around 60% down to an average of around 24% across the sector.³

¹ For a more thorough explanation of this issue, refer to paragraphs 4.159 to 4.159.5 of the [Commerce Commission “Financing and incentivising efficient expenditure during the energy transition topic paper – Part 4 Input Methodologies Review 2023 – Final decision” \(13 December 2023\)](#).

² In present value terms, the status quo would have delivered the lowest overall revenues.

³ [Commerce Commission “Default price-quality paths for electricity distribution businesses from 1 April 2025 – Final decision – Reasons paper” \(20 November 2024\)](#), at [X12] and [4.57].

X18 In this paper, we have used Vector’s information to demonstrate the effect on revenues from the different options (see Table X1 below).⁴ We found the following:

X18.1 Had a trailing average been in place in the last electricity distribution business (**EDB**) reset, the price shock before revenue smoothing for Vector would have been 36% and 27% increases for a five-year and a ten-year trailing average respectively, compared to 45% under the current hybrid approach. However, we achieved a lower price change (25%) through alternative smoothing tools.

X18.2 This demonstrates that other factors (including inflation and expenditure increases) were very significant contributors to the price shock. It also demonstrates our ability to use other tools to smooth revenue between and within periods. Ultimately, the total revenue allowances are what will be recovered from consumers. Our view is that where smoothing is desirable, this should consider the profile of total revenues.

Table X1 Modelled revenue figures under various approaches (nominal, \$000’s)

Approach	2025	2026	Increase
Prevailing approach prior to smoothing	539,899	782,175	45%
Prevailing approach post-smoothing	539,899	674,874	25%
Five-year trailing average cost of debt	563,996	769,604	36%
10-year trailing average cost of debt	583,978	739,531	27%

X19 Therefore, smoothing the real risk-free rate for the cost of debt by using a trailing average would bring negligible revenue smoothing benefits relative to both, the complexity associated with it and—crucially—the fact that we have more effective revenue smoothing tools.

X20 So, in addition to the reasons related to the IM Review objectives, our draft decision is to retain the current hybrid approach because we can use other existing tools to alter the revenue profile between and within regulatory periods. Suppliers have the option to smooth revenue within a regulatory period even further. These alternative smoothing tools allow us to consider total revenue, rather than smoothing one relatively small component of the WACC. In addition, a trailing average approach with annual updates is somewhat more complex to implement. It is not apparent that there is a benefit worth this additional cost to consumers.

⁴ We used Vector because the change in revenue is representative of the average for EDBs, and because we build the financial model used for the DPP reset, whereas Chorus and Transpower build and own the financial models used for their respective resets. Furthermore, the DPP4 reset resulted in the largest price shock that has occurred under our regime and provides the best opportunity to understand the potential smoothing effects of adopting a TACD.

A trailing average approach would not better promote our objectives

- X21 We consider that the status quo better promotes the objectives of the IM review compared to the alternatives.
- X22 Our draft decision is guided by our IM Review decision-making framework. Under our decision-making framework, there are considerations we must give effect to other than smoothing prices. Our view is that our decisions on the WACC must promote the statutory purpose, most relevantly here, by incentivising investment in suppliers' networks and limiting excessive profits while still promoting the certainty of our rules and decreasing regulatory complexity and compliance costs. In respect of telecommunications, we also need to make decisions that best give or are likely to best give effect to the promotion of competition for the benefit of telecommunication services end-users (where relevant).
- X23 Since 2013, regulated suppliers under Part 4 of the Commerce Act and more recently, those regulated under Part 6 of the Telecommunications Act, have invested around \$21 billion,⁵ with electricity lines businesses forecasting significant uplifts in capex throughout their current regulatory period.
- X24 We have carefully assessed both a five and a ten-year trailing average approach against the prevailing approach. In short:
- X24.1 A ten-year trailing average is worse than the status quo at providing regulated suppliers with incentives to invest, limiting their ability to extract excessive profits and, where relevant, promoting workable competition in telecommunications markets for the long-term benefit of end-users.
- X24.2 A five-year trailing average and the status quo can provide regulated suppliers with incentives to invest, limit their ability to extract excessive profits and, where relevant, promote workable competition in telecommunications markets for the long-term benefit of end-users. We consider that both approaches can do so in a broadly equivalent way, and so their relative merits are finely balanced.

⁵ This is sourced from regulated suppliers' information disclosures which can be found on their websites. Performance data for different regulated suppliers can also be found on our website in the different sector pages under the regulated industries tab [here](#). This number includes suppliers regulated only via ID regulation. Data used is as reported in ID disclosures, so is not adjusted for inflation.

- X25 A trailing average would require an annual adjustment to revenue allowances and potentially a number of other changes that would increase the complexity of the regime and likely increase administration and compliance costs.⁶ This adjustment would require some regulatory effort, but this is not, on its own, sufficient to rule out the change. An alternative that would avoid this would be an end-of-period washup, but this does not have the price smoothing benefits that stakeholders are seeking and so we have not considered it further in reaching our draft decision. In addition, there would likely be transition costs for regulated suppliers. Again, this is not, on its own, sufficient to rule out the change. Crucially, as explained, we have other tools that are better suited to smoothing revenues at the aggregate level.
- X26 We have concluded that, while the relative merits of the status quo and the alternative five-year trailing average are finely balanced, once we weigh all the above considerations, it is not clear to us that the alternative to the status quo would better promote the objectives of our IM Review decision-making framework.
- X27 We remain open minded and welcome stakeholder submissions.
- X28 We have included a summary of our draft decisions in Table X2 below. We have set out the detailed reasons for each draft decision in the relevant section of this paper, including stakeholder submissions and our response, analyses and expert reports.

Providing your views on this draft decision

- X29 We invite submissions on our draft decision by **5pm on 16 April 2026**. We will publish public versions of submissions and invite cross submissions by **5pm on 6 May 2026**. The submission process is set out in Chapter 2.

⁶ For example, changes to incentive mechanisms that rely on the WACC and other time value of money adjustments that are made during the regulatory period, whereas the current approach provides a single WACC value for the five-year regulatory periods.

Table X1 Overview of the cost of capital IM draft decision (Tranche 1)

#	Draft decision
COST OF DEBT	
The simple approach to estimating the cost of debt	
D1	Maintain the simple approach to estimating the cost of debt, using publicly traded bonds denominated in New Zealand dollars (NZD) to estimate the cost of debt.
Risk-free rate for cost of debt	
D2	Maintain the current approach of using a prevailing risk-free rate for the cost of debt, calculated by averaging the observed market yields on the NZ Government bonds (NZD denominated, domestically issued) over a three-calendar month determination window.
D3	Maintain the current approach to the term of the risk-free rate for the cost of debt by aligning it with the length of the regulatory period.
Debt premium	
D4	Maintain our current approach to calculating the debt premium, taking a five-year trailing average.
Term credit spread differential (TCSD)	
D5	Maintain the methodology for calculating the Term Credit Spread Differential (TCSD), that is to maintain the current formula of combining the spread premium and the negative adjustment to debt issuance costs.
D6	Maintain the 10-year cap on the TCSD allowance.
D7	Maintain the current approach of not specifying a TCSD for airports services and leave the decision for Airport's price setting event.
Debt issuance and associated costs	
D8	Maintain the current approach to debt issuance and associated costs.
COST OF EQUITY	
Risk-free rate for cost of equity	
E1	Maintain the current approach of using a prevailing risk-free rate for the cost of equity, calculated by averaging the observed market yields on the NZ Government bonds (NZD denominated, domestically issued) over a three-calendar month determination window.
E2	Maintain the current approach to the term of the risk-free rate for the cost of equity by aligning it with the length of the regulatory period.
Tax-adjusted market risk premium (TAMRP)	
E3	Amend the IMs to introduce the methodology to estimate the TAMRP in the IMs (rather than specifying a specific value). Amend the methodology for calculating TAMRP.
E4	<ul style="list-style-type: none"> Remove the dividend growth model (DGM) and Surveys methods from the mechanical estimation.

Draft decision

Tax-adjusted market risk premium (TAMRP) contd...

- E5**
 - **Amend** the averaging approach for the remaining three methods to use a simple average rather than the median
- E7**
 - **Review** the estimated TAMRP with respect to conditioning variables, such as DGM estimates and the swap spread.
- E8**
 - **Amend** the rounding approach by rounding the estimate to the nearest 25 bps rather than 50 bps.
- E9**
 - **Introduce** the methodology to estimate TAMRP in the IMs rather than the specific value.
- E10**
 - **Stipulate** that we would estimate the TAMRP when issuing a cost of capital determination unless we have estimated it in the preceding 24 months.

Equity issuance costs

- E11** **Maintain** our current approach of not including an allowance for equity issuance costs.

Other WACC issues**Tax rates**

- W1** **Maintain** the current approach to tax rates. That is to:
 - use the statutory corporate tax rates at the time when estimating the WACC (currently 28%); and
 - use an investor tax rate that reflects the maximum prescribed investor rate under the Portfolio Investment Entity (PIE) regime at the time when estimating the WACC (currently 28%).

Information Disclosure and Price-Quality Weighted Average Cost of Capital determinations

- W2** **Maintain** the current approach of aligning the methodology for Information Disclosure (**ID**) and Price-Quality (**PQ**) WACC determinations.

Reasonableness checks

- W3** **Maintain** the reasonableness checks as part of the cross-check on our WACC estimates.

Split of issues under the tranching approach for this IM Review

- W4** **Maintain** our current approach to this IM Review to consider the common methodologies for cost of capital as part of Tranche 1, and the fibre specific parameters as part of Tranche 2.

Chapter 1 Review of the cost of capital input methodologies

Scope of the cost of capital review for both the Fibre and Part 4 regulatory regimes

- 1.1 We have reviewed elements of the Part 4 of the Commerce Act 1986 (**Part 4**) cost of capital input methodologies (**IMs**) (for airports, electricity lines, and gas pipelines) that are common with services regulated under Part 6 of the Telecommunications Act 2001 (**Part 6**) so that our approach to these elements is aligned where possible. We have considered the scheme and purpose of both Part 4 of the Commerce Act and Part 6 of the Telecommunications Act as relevant. Our draft decision is set out in this paper.
- 1.2 We issued two notices of intention alongside the Open letter to commence our review on 27 March 2025.⁷ One stated our intention to begin work to review the Fibre input methodologies (**Fibre IMs**), and the other our intention to begin work on reviewing the cost of capital IMs for Part 4 services.
- 1.3 We are reviewing our overall methodology for estimating the weighted average cost of capital (**WACC**), including our approach to the risk-free rate of interest for debt and equity and the debt premium, as well as the tax-adjusted market risk premium (**TAMRP**). The scope of this review is limited to those elements of the WACC IMs that are common to all sectors. It does not include sector specific parameters, such as the asset beta, equity beta and leverage.
- 1.4 Our draft decision on the other Fibre IMs (excluding the cost of capital IM) are in a separate draft decision reasons paper.⁸
- 1.5 Parameters of the cost of capital that are specific to Fibre will be considered in Tranche 2 of the Fibre Input Methodologies Review (**Fibre IM Review**).
- 1.6 The Part 4 IMs were reviewed in 2023. We are not reviewing the sector specific parameters for sectors regulated under Part 4 of the Commerce Act as part of this Fibre IM Review. The next planned review of these parameters is in 2030.

⁷ [Commerce Commission "Notice of Intention – Fibre Input Methodologies Review 2027" \(27 March 2025\)](#); and [Commerce Commission "Notice of Intention – Cost of Capital Review for Electricity Lines Services, Gas Pipeline Services, and Specified Airport Services" \(27 March 2025\)](#).

⁸ Commerce Commission “Fibre input methodologies review 2027 (Tranche 1) – Draft decision reasons paper” (17 March 2026). This paper is being published on the 17th of March and will be able to be found [here](#).

Input methodologies are the upfront rules designed to promote certainty about how we regulate

- 1.7 Input methodologies (**IMs**) are the upfront rules, processes and requirements of regulation set under Part 6 and Part 4, and apply to:
- 1.7.1 Chorus, which is subject to price-quality and information disclosure regulation under Part 6;
 - 1.7.2 the other local fibre companies: Enable, Northpower, and Tuatahi, that are subject to information disclosure regulation only under Part 6; and
 - 1.7.3 all suppliers of electricity lines services, gas pipeline services and specified airport services, that are subject to price-quality and/or information disclosure regulation under Part 4.
- 1.8 The purpose of IMs, set out in s 174 of the Telecommunications Act 2001 (the **Act**) and s 52R of the Commerce Act 1986 (the **Commerce Act**), is to promote certainty for suppliers and consumers in relation to the rules, requirements, and processes applying to regulation.

Aligning the common WACC IM review timeframes

- 1.9 Section 182(1) of the Act, and s 52Y(1) of the Commerce Act requires us to review the IMs no later than seven years after their date of publication, and after that, at intervals of no more than seven years.
- 1.10 Previously, our review of the common elements of the cost of capital across both Fibre and the Part 4 regimes were conducted on separate timeframes. This meant we considered these common elements more often, because IM reviews which covered the same common parameters occurred shortly after each other. For example, the current Fibre IM Review has started very shortly after the 2023 IM Review concluded.⁹ We consider there is value in aligning the review cycles for these common elements, which we have now done.
- 1.11 We have reviewed elements of the cost of capital fibre IM (under Part 6 of the Act) that are common with services regulated under Part 4 (airports, electricity lines, and gas pipelines) so that our approach is aligned where possible.

⁹ This is the first review of the fibre IMs. We completed our second review of the Part 4 IMs in December 2023.

Decision-making framework - Fibre and the Part 4 regulatory regimes

- 1.12 Both Part 6 of the Act and Part 4 of the Commerce Act are designed to enable the use of regulation to promote certain outcomes that are consistent with the characteristics of workably competitive markets. This is reflected in the purpose statements in s166(2) of the Act and s 52A of the Commerce Act (referred to throughout this paper as “the statutory purposes”).
- 1.13 We have published the Fibre Input Methodologies - Decision-making Framework paper alongside this reasons paper. In reaching our draft decision we were guided by three overarching objectives set out in the Decision-making Framework.¹⁰ As such, we have only proposed changes to the IMs if it appears likely to meet one or more of these overarching objectives:
- 1.13.1 promoting the statutory purposes in s 166(2) of the Act and/or s 52A of the Commerce Act more effectively;
 - 1.13.2 promoting the IM purpose in s 174 of the Act and/or s 52R of the Commerce Act more effectively (without detrimentally affecting the promotion of the statutory purposes); or
 - 1.13.3 significantly reducing compliance costs, other regulatory costs or complexity (without detrimentally affecting the promotion of the statutory purposes).
- 1.14 In terms of how we have considered the statutory purposes in coming to our draft decision on the common elements of the cost of capital IM amendments, we note that Parliament based the regulatory model for fibre fixed line access service (**FFLAS**) on the existing regime in Part 4 of the Commerce Act. Some of the key provisions in Part 6, including the purpose statement in s162 of the Act, are based on corresponding provisions in Part 4 of the Commerce Act.¹¹
- 1.15 For the purposes of making decisions about the elements of the cost of capital that are common to both regimes, the Commission views these statutory purposes as consistent.¹² We have therefore referred to the “statutory purposes” in our reasoning below (to reference both Part 6 and Part 4 statutory purposes).

¹⁰ [Commerce Commission "Fibre input methodologies – DRAFT Decision-making framework paper" \(10 July 2025\)](#), at [3.6]. The final decision-making framework paper can be found [here](#).

¹¹ There are important similarities and differences between Part 6 and Part 4. [Commerce Commission "Fibre input methodologies – DRAFT Decision-making framework paper" \(10 July 2025\)](#), at [2.23 to 2.27]

¹² There are differences between the definitions used in each purpose statement: in particular, the definition of “consumer” in Part 4 captures intermediate acquirers (such as retailers), whereas the definition of “end-user” is confined to the ultimate recipient of a service. We consider the distinction between end-users and consumers is not relevant for the purposes of our decisions on the first tranche elements of the cost of capital.

- 1.16 We consider that the most relevant outcomes of the statutory purposes for the cost of capital IMs are:
- 1.16.1 that regulated suppliers have incentives to innovate and to invest, including in replacement, upgraded, and new assets;¹³
 - 1.16.2 that regulated suppliers/fibre service providers are limited in their ability to extract excessive profits.¹⁴
- 1.17 We note that in the Fibre context, s 166(2)(b) of the Act has the additional requirement that we must, where relevant, make decisions that we consider best give, or are likely to best give, effect to the promotion of workable competition in telecommunications markets for the long-term benefit of end-users of telecommunications services.
- 1.18 Our draft decision has been made because we consider it best gives, or is likely to best give, effect to the s 166(2) purposes. We have not considered it necessary to specifically explain why each individual draft decision best gives, or is likely to best give, effect to the s 166(2) purposes. Rather, each draft decision, and our rationale for each draft decision is intended to contribute to our overall determination of the common elements of the cost of capital that best gives, or is likely to best give, effect to the s 166(2) purposes.

What we are consulting on

Seeking submitter views on our draft decision

- 1.19 This paper sets out our draft decision on cost of capital matters common to Part 6 and Part 4.¹⁵ The draft decision is summarised in table X1.1 and the reasons for the draft decision are set out in this paper. We have published the draft amendment determinations for each sector regulated under Part 6 and Part 4, which sets out the proposed changes to the IMs as a result of our draft decision.¹⁶

¹³ [Commerce Act 1986](#), s 52A(1)(a); and [Telecommunications Act 2001](#), s 162(a).

¹⁴ [Commerce Act 1986](#), s 52A(1)(d); and [Telecommunications Act 2001](#), s 162(d).

¹⁵ An explanation of the issue/sub topic identification process followed and our two Tranche approach is set out in [Commerce Commission "Fibre input methodologies review 2027 – Issues paper \(Tranche 1\)" \(10 July 2025\)](#), at [4.8 to 4.10].

¹⁶ The draft IM amendment determinations have been published alongside this draft decision and can be found [here](#).

Table 1.1 Structure of the draft decision reasons paper – common cost of capital IMs

Chapter	Chapter name	Topics
	Executive Summary	High level overview Table summarising our draft decision on Tranche 1 cost of capital topics
1	Review of the cost of capital input methodologies	Scope of the cost of capital review for both the Fibre and Part 4 regulatory regimes Input methodologies are the upfront rules designed to promote certainty about how we regulate Aligning the common WACC IM review timeframes Decision-making Framework – Fibre and the Part 4 regulatory regimes What we are consulting on Material published alongside this paper What we are not consulting on Next steps
2	Submission process	How you can make a submission Identifying and managing confidential information
3	Overview of the cost of capital	Introduction to weighted average cost of capital Introduction to cost of capital input methodologies Introduction to real returns and our regime
4	Cost of debt – risk-free rate	The risk-free rate for the cost of debt Maintaining a prevailing approach to the risk-free rate for cost of debt Maintaining the estimation window of three months Aligning the term of the risk-free rate with the length of the regulatory period
5	Other cost of debt issues	The simple and complex approach to estimating the cost of debt Our approach to the debt premium Term credit spread differential (TCS) Debt issuance and associated costs
6	Cost of equity	Risk-free rate for cost of equity Tax-adjusted market risk premium (TAMRP) Equity issuance costs
7	Other weighted average cost of capital issues	Tax rates Reasonableness checks Aligning the methodology of price-quality and information disclosure weighted average cost of capital determinations The split of issues under the tranching approach to the Input Methodologies Review
8	Other matters raised	Our response to recent submissions that are not addressed elsewhere in this paper

Material published alongside this paper

- 1.20 A summary of the material published alongside this paper is provided in table 1.2.
- 1.21 We will publish Fibre input methodologies review 2027 (Tranche 1) draft decision package on 17 March 2026 on other fibre IM topics.

Table 1.2 Additional material in the cost of capital IM draft decision package

Document	Brief description of the document
Review of cost of capital input methodologies (IMs) – Explanatory Overview	Document prepared by the Commission that provides some background information on what the WACC is, and the role it plays in our regulatory regime. It is intended to assist with engagement on our draft decision.
Draft amendment determinations:	Sets out the proposed drafting of new or amendments to existing clauses within determinations to give effect to the draft decision.
1. [DRAFT] Airport Services Input Methodologies (TAMRP methodology) Amendment Determination 2026	
2. [DRAFT] Electricity Distribution Services Input Methodologies (TAMRP methodology) Amendment Determination 2026	
3. [DRAFT] Fibre Input Methodologies (TAMRP methodology) Amendment Determination 2026	
4. [DRAFT] Gas Distribution Services Input Methodologies (TAMRP methodology) Amendment Determination 2026	
5. [DRAFT] Gas Transmission Services Input Methodologies (TAMRP methodology) Amendment Determination 2026	
6. [DRAFT] Transpower Input Methodologies (TAMRP methodology) Amendment Determination 2026	
Commission’s response to joint submission on the Fibre IM Review Issues paper concerning common cost of capital IMs (10 March 2026)	Commerce Commission’s response to the submission from joint submitters on the Issues paper.
Frontier Economics (Stephen Gray): Return on debt and risk-free rate (July 2025)	Frontier Economic’s report on the approach to the risk-free rate for the cost of debt, and the term of the risk-free rate for the cost of equity.

Document	Brief description of the document
Sapere Research Group (Glenn Boyle) The New Zealand Commerce Commission’s Approach to Setting the Term of the Risk-Free Rate: Review and Evaluation. (8 September 2025)	A short note on the term of the risk-free rate for the cost of equity prepared by an external expert.
Sapere Research Group (Glenn Boyle and Matthew Williamson) The Commerce Commission’s Approach to Estimating the Tax-Adjusted Market Risk Premium as of 2025: Review and Evaluation (12 November 2025)	Expert report on the approach to estimating the TAMRP.
Transpower’s response to our query on hedging practices (1 September 2025)	Transpower’s response to follow-up questions on their ability to hedge to the allowed risk-free rate.
Chorus response to our query on hedging practices (1 December 2025)	Chorus’ response to follow-up questions on their ability to hedge to the allowed risk-free rate.
Tax-adjusted market risk premium calculation (Excel spreadsheet)	A spreadsheet which performs the calculations to produce TAMRP values for the Ibbotson, Siegel 1 and Siegel 2 methods from 2024 onwards in accordance with the IMs and calculates the DGM TAMRP in 2026.
Revenue model - 5-year TACD version (Excel spreadsheet)	Our model aiming to demonstrate the impact on revenues across the DPP3 and DPP4 regulatory period resets under various approaches to setting the risk- free rate.
Revenue model - 10-year TACD version (Excel spreadsheet)	Our model aiming to demonstrate the impact on revenues across the DPP3 and DPP4 regulatory period resets under various approaches to setting the risk- free rate.
Effective interest rates (Excel spreadsheet)	Our analysis of the effective interest rates allowed under each approach accounting for the impact of inflation wash-ups.

What we are not consulting on

- 1.22 We are not seeking submissions on Tranche 2 topics at this stage. We will publish an issues paper on key topics for Tranche 2 in Q2 2026 and parties will be given an opportunity to comment.¹⁷
- 1.23 At this stage, we have identified the following parameters specific to Fibre to be considered in Tranche 2:
- 1.23.1 Equity beta and asset beta;
 - 1.23.2 Leverage ratio;

¹⁷ Quarters refer to the calendar year, ie Q1 means January – March.

- 1.23.3 Credit rating;
- 1.23.4 The value of the spread premium (and the term credit spread differential);
- 1.23.5 Standard errors;
- 1.23.6 WACC percentile;
- 1.23.7 The asset stranding allowance;
- 1.23.8 Reasonableness checks;
- 1.23.9 The annual benefit of Crown financing.

Next steps

- 1.24 The details of the IM Review process were outlined in our Issues paper and key dates are updated in table 1.3.¹⁸ Interested parties have opportunities to participate at each stage of our process. We can, as with all processes we run, add further process steps, if necessary, due to a material change in our decision or reasons.

Table 1.3 Indicative timeline for the Fibre IM Review project

Date	Key process or publication
27 March 2025	Open letter and Notice of Intention (NOI)
10 July 2025	Issues paper on Tranche 1 issues Draft Fibre IM Review decision-making framework paper
10 March 2026	Tranche 1 draft decision – cost of capital IMs (common to Part 4 and Part 6) Fibre IM Review decision-making framework paper
17 March 2026	Tranche 1 draft decision – fibre IMs
16 April 2026	Submissions on Tranche 1 draft decision close
6 May 2026	Cross submissions on Tranche 1 draft decision close
Q2 2026	Issues paper on Tranche 2 issues Consultation on Tranche 2 Issues paper
Q3 2026	Tranche 1 final decisions
Q1 2027	Tranche 2 draft decision Consultation on Tranche 2 draft decision
October 2027	Tranche 2 final decision

¹⁸ [Commerce Commission "Fibre input methodologies review 2027 – Issues paper \(Tranche 1\)" \(10 July 2025\)](#), at [1.16]-[1.28].

Chapter 2 Submission process

How you can make a submission

- 2.1 There are opportunities for interested parties to participate at each stage of this IM Review process. We are now seeking feedback on cost of capital IM draft decision (Tranche 1) set out in table X1.
- 2.2 In providing feedback it would be helpful for stakeholders to:
 - 2.2.1 consider our decision-making framework objectives, including the requirement on the Commission to promote the statutory purposes and other statutory decision-making considerations, when preparing their submissions; and
 - 2.2.2 provide details of alternative approaches to resolve any issues raised with the draft decision along with supporting evidence of why those alternatives should be preferred.
- 2.3 Submitters are welcome to provide one submission document responding to this draft decision reasons paper, supporting materials, and the Fibre input methodologies review 2027 (Tranche 1) draft decision reasons paper due to be published on 17 March 2026 on fibre specific topics.

Key dates for submitters

- 2.4 We welcome your views on this paper by **5pm on 16 April 2026**. We will publish public versions of submissions we receive by **22 April 2026** and invite cross submissions by **5pm on 6 May 2026**.

Address for submissions

- 2.5 Please email your submissions to infrastructure.regulation@comcom.govt.nz with “IM Review cost of capital IM draft decision paper submission – [your submitter name]” in the subject line of your email.
- 2.6 You can submit by emailing your submission in both a format suitable for word processing (such as a Microsoft Word document), as well as a ‘locked’ format (such as a PDF) for publication on our website.

Identifying and managing confidential information

- 2.7 The protection of confidential information is something we take seriously. If you need to include commercially sensitive or confidential information in your submission or cross-submission, you must provide us clearly identifiable confidential and non-confidential/public versions of your submission.

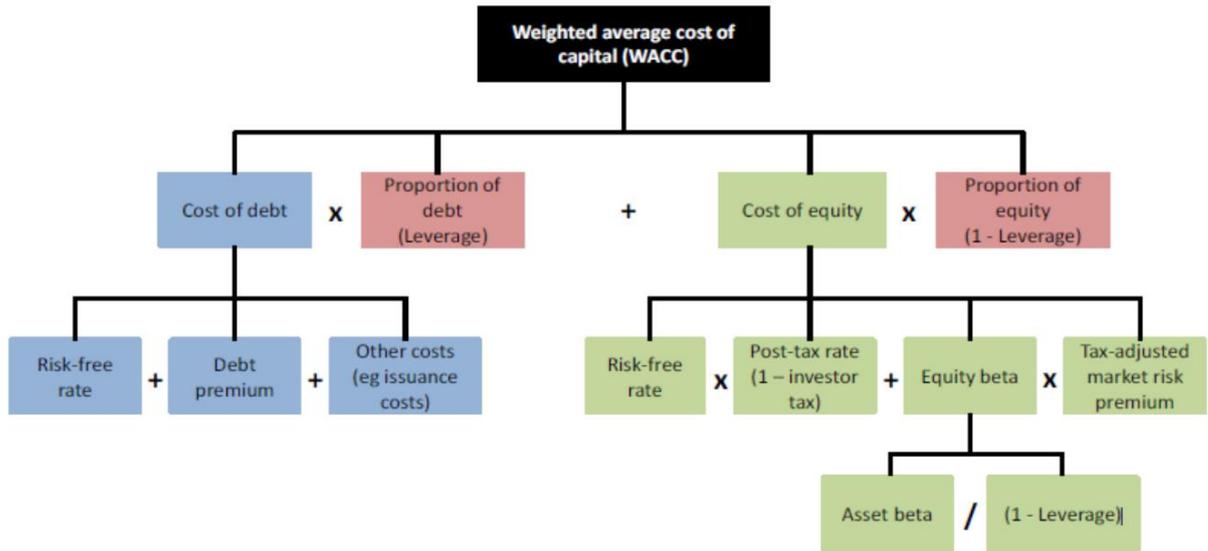
- 2.8 When including commercially sensitive or confidential information in your submission, we offer the following guidance:
- 2.8.1 Please provide a clearly labelled confidential version and public version. We intend to publish all public versions on our website.
 - 2.8.2 The responsibility for ensuring that confidential information is not included in a public version of a submission rests entirely with the party making the submission.
 - 2.8.3 All submissions and cross submissions we receive, including any parts that we do not publish, can be requested under the Official Information Act 1982. This means we would be required to release material that we do not publish unless good reason existed under the Official Information Act 1982 to withhold it. We would normally consult with the party that provided the information before we disclose it to a requestor.

Chapter 3 Overview of cost of capital

Introduction to weighted average cost of capital

- 3.1 The cost of capital is the expected financial return investors require from an investment given its risk. Investors have choices and will not invest in an asset unless the expected return is at least as good as the return they would expect to get from a different investment of similar risk.
- 3.2 There are two main types of capital: debt and equity capital. Both have a cost from the perspective of the entity that is seeking funds from investors. For debt, it is future interest payments. For equity, it is the expectation of dividend payments by the firm, and where profits are retained and reinvested, the expectation of larger dividend payments by the firm sometime in the future.
- 3.3 The weighted average cost of capital (the WACC) reflects the cost of debt and the cost of equity, given the mix of debt and equity. We use a post-tax WACC and a vanilla WACC. The former includes the after-tax cost of debt; the latter includes the cost of debt before tax, as shown in the following equations:
- $$\text{Post-tax WACC} = \text{cost of debt (after-tax)} \times \text{leverage} + \text{cost of equity} \times (1 - \text{leverage})$$
- $$\text{Vanilla WACC} = \text{cost of debt} \times \text{leverage} + \text{cost of equity} \times (1 - \text{leverage})$$
- 3.4 Post-tax WACC estimates are more frequently used in New Zealand, and more easily understood by interested persons, than vanilla WACC estimates. However, the use of vanilla WACC estimates is consistent with our IM approach to regulatory tax for price-quality (**PQ**). Accordingly, we use vanilla WACC estimates for PQ, and both vanilla WACCs and post-tax WACCs for the purpose of Information Disclosure (**ID**) regulation.
- 3.5 A number of parameters must be calculated to derive our estimates. These are as set out in Figure 3.1.

Figure 3.1 Components of vanilla WACC



Introduction to cost of capital input methodology

- 3.6 Because the actual cost of capital of regulated suppliers/providers is not observable, we must estimate it. The cost of capital IM seeks to specify rules for the calculation of a reasonable and commercially realistic cost of capital given investor's exposure to risk.
- 3.7 The cost of capital as set out in the IM has two parts:
- 3.7.1 The first component is a methodology for calculating the WACC. The WACC is determined for each regulated service and applies to all regulated suppliers/providers of that service; and
- 3.7.2 The second component is the Term Credit Spread Differential (**TCSD**), which is treated as an adjustment to cash flow and applies to qualifying firms only.
- 3.8 The cost of capital IM will produce estimates of the cost of capital for regulated suppliers/providers on a forward-looking basis. That is, it reflects expectations of the returns required in the future, which cannot be observed in advance. We provided a detailed explanation of the WACC and cost of capital IM in our 2020 Fibre IM final reasons paper.¹⁹

¹⁹ [Commerce Commission "Fibre input methodologies: Main final decisions – reasons paper" \(13 October 2020\)](#), at [6.6]-[6.43].

- 3.9 Overall, based on our experience with the cost of capital IMs, we consider that our fundamental approach to the cost of capital methodology is sound and works well for both Part 6 and Part 4. However, the estimation of the cost of capital is not a mechanical task. The available tools used to estimate the cost of capital are imperfect; the data can be hard to obtain or unreliable and can change over time; older data can be reinterpreted in new ways and newer data may call into question previous assumptions. Therefore, in reaching our draft decisions in determining the common methodologies for estimating the cost of capital, which best gives, or is likely to best give, effect to the statutory purposes for both ID and PQ regulation, we have to exercise a degree of judgement.
- 3.10 As part of this Fibre IM Review process, we received several submissions in response to our Open letter and the Issues paper. Some of the submissions referred to previous submissions provided in response to consultations on previous IM Reviews.²⁰ As part of our analysis and in coming to our draft decision we have considered those previous submissions as relevant.²¹ We note that any submissions previously provided to us have been considered in our previous decisions, and many covered similar points as those raised by submitters in response to our Open letter and Issues paper. We have also considered the 2023 confidential debt survey and three expert reports we commissioned (one from Frontier Economics and two from Sapere Research Group (**Sapere**)).²²
- 3.11 We consider that our draft decision on the common WACC methodology enable us to estimate a cost of capital that is reasonable, commercially realistic and best promotes the statutory purposes. Our draft decision promotes regulatory certainty, in line with s 174 of the Telecommunications Act 2001 and s 52R of the Commerce Act 1986, and do not unduly increase complexity or compliance costs. Overall, our view is that our draft decision best promotes our decision-making framework objectives.
- 3.12 The following paragraphs provide a brief introduction on the components of the cost of capital, especially those considered in our Tranche 1 draft decision.

²⁰ Where points raised were the same as new submissions, we have responded to the more recent submissions in this paper.

²¹ We also note that some previous submission points related to industry-specific parameters which will be considered in Tranche 2.

²² Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025); Sapere Research Group "The New Zealand Commerce Commission's Approach to Setting the Term of the Risk-Free Rate: Review and Evaluation" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', 8 September 2025); and Sapere Research Group "The Commerce Commission's Approach to Estimating the Tax-Adjusted Market Risk Premium as of 2025: Review and Evaluation" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', 12 November 2025). These reports have been published alongside this draft decision and can be found [here](#).

Cost of debt

- 3.13 Debt is an important source of capital for many businesses. Our draft decision is to estimate the cost of debt by observing the interest rate paid by the New Zealand Government, and the additional premium corporate borrowers pay to compensate investors for the additional risks of lending to them (relative to the Government debt). We also allow for the costs of issuing debt, and the costs of entering interest rate swaps to shorten the term of the debt and better align it to the length of the regulatory period.
- 3.14 In Tranche 1, our draft decision for the cost of debt includes the following topics:
- 3.14.1 the risk-free rate;
 - 3.14.2 the debt premium;
 - 3.14.3 the approach to TCSD; and
 - 3.14.4 debt issuance and associated costs.
- 3.15 The risk-free rate is the rate of interest expected when there is no risk of default. Debt issued by the New Zealand Government and denominated in New Zealand dollars is a good proxy for debt free of default risk. The rate of interest on government issued debt can generally be readily observed from trading on the debt market.
- 3.16 The debt premium is the additional interest rate, over and above the risk-free rate, required by suppliers of debt capital to compensate them for being exposed to the risks of default in lending to a firm, plus an allowance for the inferior liquidity of corporate bonds relative to government bonds. In general, the longer the firm wishes to borrow the debt for, the higher the debt premium that the firm must pay to the suppliers of debt capital. The debt premium is also closely related to the firm's credit rating. The better the firm's credit rating, the lower the debt premium it must pay to the suppliers of debt capital.
- 3.17 Firms incur costs when raising new debt. These costs are not reflected in the debt premium but are an inherent cost of raising the debt finance needed to support an ongoing business. We consider that these costs should be included in the cost of capital for regulated suppliers/providers.
- 3.18 Firms typically have a mix of debt maturities to manage refinancing risk, including issuing long-term debt. This spreads a firm's refinancing requirements over a longer period and reduces the amount of debt that needs to be refinanced in any given year. Reducing refinancing risks has benefits for consumers, but long-term debt typically has a greater cost than medium- or short-term debt.

- 3.19 Firms can manage movements in the risk-free rate by using interest rate swaps. An interest rate swap enables a regulated supplier/provider, if it wishes, to align the risk-free rate portion of their existing debt with the regulatory allowance. We consider that some degree of hedging activity by regulated suppliers/providers can be beneficial to consumers, as it can enable regulated suppliers/providers to both reduce their risk exposure and lower interest costs. We have therefore included an allowance for the cost of entering interest rate swaps, as part of our debt issuance and associated costs.
- 3.20 Unlike the risk-free rate, the debt premium cannot be easily hedged and consequently we allow for the additional debt premium associated with long-term debt through the TCSD.

Cost of equity

- 3.21 Equity is the second main source of capital. The difficulties in estimating the cost of equity are greater than in estimating the cost of debt. The cost of equity, expressed as a rate of return, is the discount rate implicit in the price at which equity can be raised (given the investors' expectations of future cash-flows which they will derive or have claim to). This discount rate cannot be directly observed. Consequently, the cost of equity, and most of its components, have to be estimated based on an analytical model.
- 3.22 There are a number of methods to estimate the cost of equity including the Capital Asset Pricing Model (**CAPM**), the dividend growth model and the Fama-French three factors model. Of these, the CAPM is the most commonly used.
- 3.23 The CAPM proposes that the cost of equity can be modelled as comprising a risk-free component and a premium for risk. Under the CAPM, the size of the premium for risk increases in line with increases in the firm's exposure to systematic risk (with a measure of this risk, which is referred to as beta).²³
- 3.24 To reflect New Zealand's taxation system, and specifically, to recognise the presence of imputation credits and the general absence of taxes on capital gains, a simplified version of CAPM called simplified Brennan-Lally CAPM (**SBL-CAPM**) has become the dominant form of the CAPM used in New Zealand. We have been using the SBL-CAPM to estimate the cost of equity since 2010 when we first developed the Part 4 WACC IM and 2020 when we first set up the Fibre WACC IM.
- 3.25 The market risk premium (**MRP**) represents the additional return, over and above the risk-free rate, that investors look for to compensate them for the risk of holding a portfolio of average risk. Under the SBL-CAPM, the MRP is adjusted for tax faced by the investor on equity return, therefore the MRP becomes the tax-adjusted MRP (**TAMRP**).
- 3.26 Beta is a measure of exposure to systematic risk. It measures the extent to which the returns to a company fluctuate relative to the equity returns in the stock market. As set out in our tranching approach for this IM Review, we will update the beta based on the most recent available information for Fibre in Tranche 2 as it is a Fibre specific parameter.

²³ Systematic risk refers to market-wide risks which affect all risky investments. Non-systematic risk refers to risks which affect an individual company.

Other WACC parameters

- 3.27 Other WACC parameters included in the WACC formula contain:
- 3.27.1 tax rates;
 - 3.27.2 leverage ratio; and
 - 3.27.3 standard errors of the WACC.
- 3.28 We note that tax rates are common WACC parameters for both Part 6 of the Telecommunications Act 2001 and Part 4 of the Commerce Act 1986, and therefore we have included it within the scope of Tranche 1. The draft decision on tax rates is discussed in paragraphs 6.4-6.8. We will re-estimate the leverage ratio and standard errors of the WACC for Fibre in Tranche 2.

Other WACC issues

- 3.29 We have a separate section in this reasons paper that explains our draft decision in respect of the rest cost of capital issues for this IM Review (ie, those that do not fit neatly into the cost of debt or the cost of equity above). This includes:
- 3.29.1 aligning the methodology of ID and PQ WACC determinations;
 - 3.29.2 reasonableness checks; and
 - 3.29.3 our split of issues under a tranching approach.

Introduction to real returns and our regime

Real returns

- 3.30 When considering the return that investors require, a distinction should be made between the 'nominal return' and the 'real return'.
- 3.31 When money is lent or invested, inflation will erode the purchasing power of the balance to be repaid at a later point in time.
- 3.32 Investors will therefore form an expectation of the inflation rate over the relevant period, and the return demanded will reflect these inflation expectations. This can be labelled as the 'nominal return'.
- 3.33 Adjusting the nominal interest rate to remove the compensation for inflation expectations results in the 'real return'. The real return reflects the return demanded when holding constant the purchasing power of the amount lent or invested.

- 3.34 Simply put, when expected inflation is 0%, real and nominal interest rates are equal. If expected inflation is 2%, then a real interest rate of 5% approximately equals a nominal interest rate of 7%.²⁴

Our regime and approach to inflation

- 3.35 Under our regime, suppliers' regulatory asset bases (**RABs**) are 'indexed', meaning they are revalued to increase by forecast inflation in each year when setting the forecast revenue allowances.
- 3.36 To avoid double counting the compensation for the inflation inherent in the nominal WACC we use to calculate revenue allowances, these revaluations are treated as income and are excluded from forecast allowed revenues (ie adjusting allowed revenues from prices downwards).
- 3.37 Every year, suppliers' RABs are revalued based on actual inflation, though this occurs in their information disclosure data. At the beginning of the next regulatory period, these actual RABs are used to determine the next regulatory period's revenue allowances. This has the effect of maintaining the value of suppliers' RABs in real terms, as they move in line with actual inflation.
- 3.38 In addition, suppliers' revenue allowances are updated for the difference between the forecast of inflation used to set prices, and actual (or unexpected) inflation. This effectively targets a real return, as set at the beginning of the period based on the expected nominal return and expected inflation.
- 3.39 Importantly, without changing our approach to wash-ups or RAB indexation, these features would be the case under either approach to the risk-free rate. Adopting a trailing average, as some stakeholders have suggested, would only smooth the 'real' component of the risk-free rate. As we demonstrate below in Figure 4.2, this makes up a relatively minor portion of the allowed revenues, so we consider the scope for smoothing revenue with a trailing average to be limited.

²⁴ The Fisher equation outlines the relationship between the nominal interest rates, expected inflation and real interest rates.

Chapter 4 Cost of debt – risk-free rate

- 4.1 This chapter presents our draft decision on the risk-free rate for the cost of debt.
- 4.2 As set out in chapter 3, the cost of debt can be thought of as three components:
 - 4.2.1 the risk-free rate;
 - 4.2.2 the debt premium; and
 - 4.2.3 debt issuance costs.
- 4.3 We separately provide a term credit spread differential (TCSD) allowance to qualifying suppliers who issue long-term debt.
- 4.4 The debt premium, debt issuance costs, and the term credit spread differential (TCSD) which applies to some providers, are addressed in Chapter 5.

The risk-free rate for the cost of debt

- 4.5 The risk-free rate reflects the return an investor would require holding an asset which is virtually free of default risk. The risk-free rate cannot be observed directly. While it is typically proxied by yields on Government bonds, choices must be made on the approach to estimate this value.
- 4.6 Importantly, the risk-free rate can differ by the term to maturity in consideration. For example, longer-term interest rates are typically (but not always) greater than shorter-term interest rates.

Our draft decision

- 4.7 Our draft decision is to maintain our current approach to calculating the risk-free rate for the cost of debt.
- 4.8 The Commission emphasizes that the draft decision on the choice between a prevailing versus trailing average for the real risk-free rate incorporated in the cost of debt is finely balanced.
- 4.9 We have carefully examined at an empirical level the differences in outcomes between the two approaches, particularly in regard to the impact on revenue or price changes at five yearly regulatory resets.
- 4.10 A key objective of this consultation process is to put the empirical analysis we have undertaken in front of stakeholders to ensure there is an informed understanding of the quantitative effects of a change in approach and the wider consequences for the complexity of our regulatory regimes.

- 4.11 A change in approach is not straight-forward and potentially some stakeholders may have over-estimated the revenue smoothing benefits of a change to a trailing average for the cost of debt.
- 4.12 We want to ensure that all stakeholders understand the full range of issues and trade-offs so that submitters can be fully informed in making their submissions. We look forward to receiving stakeholders' feedback.

Current IM settings

- 4.13 The cost of capital IM (in both the Fibre and Part 4 IMs) specifies the methodology for estimating the risk-free rate:

The Commission will estimate a risk-free rate by obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds, the wholesale market linearly interpolated bid yield to maturity for a residual period to maturity equal to the regulatory period term on each business day in the 3-month period of 8 to 10 months prior to the start of the regulatory period.²⁵

- 4.14 We currently apply this 'prevailing' approach to estimating the risk-free rate for the cost of debt for all regulated suppliers under Part 4 and Part 6.
- 4.15 In doing so, we align the term for the risk-free rate with the length of the relevant regulatory period.

Reasons for our draft decision

- 4.16 We detail below our approach, considerations and reasons for our draft decision. The primary decision here is to retain the prevailing approach, and we discuss this in more detail than our decision on how the risk-free rate is calculated under this approach, in terms of the estimation window and term length.

²⁵ [Fibre Input Methodologies Determination 2020, as consolidated on 5 September 2025](#), clause 3.5.3. Similar clauses in [Electricity Distribution Services Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 4.4.3; [Transpower Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 3.5.3; [Gas Transmission Services Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 4.4.3; and [Gas Distribution Services Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 4.4.3.

Maintaining a prevailing approach to the risk-free rate for the cost of debt

Alternatives considered

- 4.17 In coming to our draft decision, we considered the alternative of adopting a ‘trailing average’ approach to the risk-free rate for the cost of debt. Under a trailing average approach, the risk-free rate is set equal to an average of previous rates and is typically updated throughout the regulatory period as new observations of interest rates become available.
- 4.18 A trailing average is typically calculated by giving equal weight to each of the historic interest rates. This assumes that regulated suppliers refinance a constant portion of their debt in each year, for example 10% each year under a ten-year trailing average. However, in calculating the average it would be possible to give a greater weighting to years where larger amounts of debt are raised or refinanced (a ‘weighted approach’). Doing so could in theory achieve a closer match between actual debt costs and the regulatory allowance, especially when actual financing practices differ from the constant refinancing assumption.²⁶

Summary of our draft decision

- 4.19 Our view is that the draft decision to retain a prevailing approach to estimate the risk-free rate for the cost of debt best promotes the objectives under the IM review decision-making framework, though the position is finely balanced.
- 4.20 In summary, our reasons for maintaining a prevailing approach to the risk-free rate for the cost of debt are:
- 4.20.1 As outlined in paragraphs 3.35 to 3.39 above, without changing our treatment of inflation or RAB indexation, adopting a trailing average would only smooth the real risk-free rate component of the cost of debt.
 - 4.20.2 The real risk-free rate for the cost of debt contributes a relatively small amount to overall revenue allowances. As demonstrated in Figure 4.2 below, the real risk-free rate for the cost of debt tends to make up less than 10% of overall revenues, and the overall revenue allowances are very similar under each approach.
 - 4.20.3 We therefore consider the scope for a trailing average to smooth revenues to be limited.
 - 4.20.4 Whilst we note stakeholders concerns about price shocks at resets, we already have other tools to smooth these. These tools allow us to smooth revenues at an aggregate level rather than individual building block components and are much simpler to administer.

²⁶ The AER use a trailing average, and is considering whether to amend its equally weighted trailing average to one that adopts the weighted approach described above.

- 4.20.5 Overall, we do not consider that the potential revenue smoothing effects of a trailing average outweigh the increased complexities and administrative burden involved, especially given that we have more effective revenue smoothing tools.
- 4.20.6 Under our decision-making framework, there are other considerations we must give effect to than smoothing prices. Our view is that our decisions on the WACC should promote the statutory purpose, by incentivising investment in suppliers' networks and limiting excessive profitability, and in telecommunications, we must make decisions that best give or are likely to best give effect to the promotion of workable competition in telecommunications markets for the long-term benefit of end-users, where relevant.
- 4.20.7 Our view is that both approaches (a trailing average or prevailing approach) can support incentives to invest. Although the position is finely balanced, we consider the prevailing approach best promotes incentives to invest as changes in financial market expectations are quicker to feed through to the revenue allowance through the regular resetting of prices.
- 4.20.8 In relation to limiting excessive profits, we do not consider that adopting a trailing average approach would better limit suppliers' ability to earn excessive profits, and depending on the design of the trailing average, could be worse in this regard.
- 4.20.9 In the context of the Fibre IM review, section 166(2) of the Telecommunications Act requires us to make decisions that we consider best gives, or is likely to best give, effect to the purpose in s 162 and, to the extent we consider relevant, the promotion of workable competition in telecommunications markets for the long-term benefit of end-users in telecommunications services (s 166(2)(b) of the Act). Our view is that the draft decision best gives effect to s 166(2) of the Act.
- 4.20.10 In circumstances where we do not consider the alternative (trailing average approach) better promotes the statutory purposes we must also weigh the benefits of amending the IMs against the regulatory complexity / costs of the regime. Our view is that adopting a trailing average would introduce regulatory complexity in several ways. In particular, designing a trailing average requires consideration of how it interacts with our wider regime, the administrative burden of annual updates to the revenue path if an annual update is performed, and may require complex transitional arrangements to mitigate any windfall gains / losses to suppliers as a result of any change to a new approach.
- 4.21 Overall, we consider that on balance, the draft decision better promotes the statutory purposes, and the objectives under our decision-making framework.
- 4.22 Below, we set out what information we have considered in reaching our draft decision and how we have analysed this information to reach our draft decision.

Approach to reaching our draft decision

- 4.23 In reaching our draft decision, we considered the following:
- 4.23.1 submissions from stakeholders, and further information requested from Chorus and Transpower;
 - 4.23.2 the expert report we commissioned from Frontier Economics;²⁷
 - 4.23.3 a modelling exercise to engage further with submissions on price shocks; and
 - 4.23.4 a recent discussion paper from the AER, who are currently considering altering their approach to the trailing average cost of debt (**TACD**).²⁸

Submissions from stakeholders

- 4.24 We received 13 submissions on our Fibre IM Review Issues paper in relation to this topic, including an expert report from Incenta on behalf of Chorus.²⁹
- 4.25 Submitters generally highlighted a desire to address price shocks at price path resets and indicated our current approach can contribute towards these. Some submitters supported amending the IMs to set the risk-free rate for the cost of debt using a trailing average approach.³⁰
- 4.26 Other submissions supporting a TACD were that:
- 4.26.1 the current approach results in excessive repricing and refinancing risk, resulting in a mismatch between actual and allowed debt costs;³¹
 - 4.26.2 a TACD would minimise the impact of a single measurement error;³²
 - 4.26.3 a TACD more closely reflects actual financing practices and debt costs, and what investors require. It also requires less reliance on swap markets;³³

²⁷ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025). This report has been published alongside this draft decision and can be found [here](#).

²⁸ We have not provided a full summary of this discussion paper below but have referred to the relevant content from the paper where applicable.

²⁹ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#).

³⁰ See [Chorus et al. "Joint letter re WACC – Fibre IM Review Issues paper \(Tranche 1\) submission" \(7 August 2025\)](#); or [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#).

³¹ For example, [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 2.

³² For example, [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 3.

³³ For example, [NZ Airports Association "Submission on Fibre Input Methodologies Review issues paper" \(7 August 2025\)](#), at [12].

- 4.26.4 many Australian regulators have adopted it, and consider it a suitable approach;³⁴
- 4.26.5 the Commission relies too heavily on the advice of a single opponent of a trailing average approach (Dr Martin Lally);³⁵
- 4.26.6 previous arguments around the administrative effort of implementing a TACD are overstated;³⁶
- 4.26.7 concerns around investment incentives are overstated. Submitters consider there is already a mismatch between allowed and actual debt costs under the current approach, as the actual cost of debt drifts away from the allowed cost throughout the regulatory period;³⁷ and
- 4.26.8 arguments that a TACD approach could disadvantage regulated suppliers are moot given they are the ones calling for a TACD. Their interest in a trailing average, and willingness to consult on how to design one would mitigate some of the implementation issues faced by Australian regulators who adopted a TACD.³⁸
- 4.27 Submissions also supported there being further consultation on issues related to the cost of capital. This includes:
- 4.27.1 several submitters suggested that if we were to adopt a TACD, further consultation would be necessary to inform its design and implementation;³⁹ and
- 4.27.2 Vector, who in addition to consultation on the design and implementation of a TACD, would like further consultation on general issues related to the WACC.⁴⁰
- 4.28 Some submitters commented on the design of a TACD. Transpower and ENA submitted that 10 years would be the appropriate length of a TACD approach.⁴¹ Chorus preferred five years.⁴² NZAA suggested the length could be shorter for airports than other sectors in both their main and cross-submission.⁴³

³⁴ For example, [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 1.

³⁵ *Ibid*, at 2.

³⁶ *Ibid*, at 2.

³⁷ *Ibid*, at 3.

³⁸ *Ibid*, at 5.

³⁹ For example, [Clarus "Fibre input methodologies review 2027: Clarus views in response to issues paper \(Tranche 1\)" \(7 August 2025\)](#), at 3.

⁴⁰ [Vector "Fibre IM review issues paper \(tranche 1\)" \(7 August 2025\)](#), at [5]-[6].

⁴¹ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 2; and [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 4.

⁴² [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 4.

⁴³ [NZ Airports Association "Submission on Fibre Input Methodologies Review issues paper" \(7 August 2025\)](#), at [14], and [NZ Airports Association "Cross-submission on Fibre Input Methodologies Review issues paper" \(27 August 2025\)](#), at 1-2.

- 4.29 Views on the necessity of a transition mechanism were mixed. 2degrees noted the importance of a TACD approach being designed to avoid windfall gains or losses.⁴⁴ Incenta (on behalf of Chorus) recommended transitional mechanisms were designed to avoid windfall gains or losses.⁴⁵ Transpower suggested a TACD could be adopted at the beginning of the next regulatory period as current debt arrangements expire.⁴⁶ ENA preferred a transition mechanism, but were open to avoiding the complexity this would bring if recent rates averaged out to something “reasonable”.⁴⁷
- 4.30 Most submitters who commented on the issue preferred some form of updating of revenue allowances, to reflect new observations of the cost of debt as they become available. Incenta (on behalf of Chorus) submitted that there should be an update to the cost of debt, either through annually updating the revenues within the period, or through an end-of-period wash-up, or through a combination of both.⁴⁸ Clarus pointed to previous submissions or reports that recommended annual updates to the cost of debt, or other tools such as wash-up mechanisms could be considered.⁴⁹ Transpower submitted that the TACD should include an annual update to the maximum allowable revenues.⁵⁰
- 4.31 NZAA agreed with our framing in the Issues paper that price stability is not a standalone objective within the IM framework, and any change made to the IMs must be assessed against the statutory purpose.⁵¹
- 4.32 Orion noted previous comments from Dr Martin Lally outlining that a TACD would likely increase the allowed cost of capital and suggested we consider the perspective of consumers on the trade-off between price shocks and higher prices.⁵²

⁴⁴ [2degrees "2degrees response to Commerce Commission Fibre input methodologies review: Issues paper" \(August 2025\)](#), at 6.

⁴⁵ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#), at 6.

⁴⁶ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 3.

⁴⁷ [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 5.

⁴⁸ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#), at 6.

⁴⁹ [Clarus "Fibre input methodologies review 2027: Clarus views in response to issues paper \(Tranche 1\)" \(7 August 2025\)](#), at 2 and 4.

⁵⁰ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 1.

⁵¹ [NZ Airports Association "Submission on Fibre Input Methodologies Review issues paper" \(7 August 2025\)](#), at [15].

⁵² [Orion "Submission – Fibre IM Review Issues Paper – Cost of Capital Issues \(Tranche 1\)" \(7 August 2025\)](#), at [3.13].

Expert report from Frontier Economics

- 4.33 We commissioned an expert report from Frontier Economics, published alongside this paper, on approaches to the risk-free rate for the cost of debt, and the term of the risk-free rate for the cost of equity. The report's conclusions on the approach to the risk-free rate for the cost of debt are summarised below:
- 4.34 Our approach to setting the cost of debt incentivises the particular debt management approach that suppliers adopt. When determining the appropriate debt management approach, the key considerations are:
- 4.34.1 whether the approach can be feasibly implemented in practice;
 - 4.34.2 whether the approach involves a high level of refinancing risk; and
 - 4.34.3 whether there is an effective match between the allowed return on debt and the actual debt costs under the approach.⁵³
- 4.35 There are two main approaches that Frontier consider feasible, in the sense that they meet the above considerations:
- 4.35.1 The 'hybrid' approach, where the risk-free rate is fixed at the beginning of the regulatory period, and the debt premium follows a trailing average approach; and
 - 4.35.2 The 'trailing average' approach, where firms are assumed to maintain a debt portfolio that involves issuing debt on a staggered basis, rolling over a new tranche every year.⁵⁴
- 4.36 Both approaches can promote efficient investment incentives.⁵⁵ However, in the case of very large amounts of capex in any given year, it is important that the allowed return on both maturing and new debt is set equal to the current rates at which this debt is issued, which would require some form of a weighted trailing average.⁵⁶
- 4.37 In Australia most regulators have adopted some form of a trailing average, though the hybrid approach is still used in some instances.⁵⁷ In doing so, the main consideration has been that it mirrors the financing practices of unregulated firms operating in workably competitive markets and is therefore more likely to reflect efficient financing practices.⁵⁸

⁵³ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at [3]. This report has been published alongside this draft decision and can be found [here](#).

⁵⁴ Ibid, at [5b].

⁵⁵ Ibid, at [9].

⁵⁶ Ibid, at [119].

⁵⁷ Ibid, section 3.5.

⁵⁸ Ibid, at [109].

- 4.38 In all cases where some form of trailing average has been adopted in Australia, the term used has been 10 years.⁵⁹
- 4.39 If a trailing average approach were to be adopted, certain choices must be made on the implementation. Amongst Australian regulators who have adopted a trailing average approach, decisions on these issues have been mixed. These issues include:
- 4.39.1 Are transitional arrangements necessary? and
- 4.39.2 Should the cost of debt allowance be updated annually, or should a wash-up be performed at the end of the regulatory period?⁶⁰
- 4.40 When debt costs are fixed in nominal terms, but revenues are washed up for inflation, the difference between forecast vs outturn inflation is borne by equity holders.⁶¹
- 4.41 Overall, the report states that starting from a blank slate, their preference would be to adopt a trailing average. However, due to existing debt obligations and the need for transitional arrangements, a hybrid approach may also be reasonable.⁶²

Our modelling exercise

- 4.42 Noting concerns in submissions about price shocks at resets, we conducted a modelling exercise to better understand the impacts of implementing a TACD approach.
- 4.43 We estimated the impact on actual revenues and price changes at the DPP4 for electricity distribution businesses (**EDBs**) in 2024 and the Transpower RCP4 reset in 2024 had a TACD been in place at the time.
- 4.44 The aim of the modelling exercise was to understand the potential that a trailing average could have to mitigate price shocks. We consider the DPP4 / RCP4 is a rather extreme case that highlights a likely upper bound on the potential revenue smoothing effects of a TACD due to interest rates returning to more typical levels relative to the low rates in 2019 (from a nominal risk-free rate of 1.12% throughout DPP3, to 4.26% in DPP4), coinciding with a period of high inflation and increased expenditure allowances.

⁵⁹ Ibid, at [7].

⁶⁰ Ibid at [110]-[111].

⁶¹ We note that this issue was considered extensively as part of our 2023 IM Review, and we decided we were comfortable with the current settings. We are not proposing to reopen this issue during the current IM review.

⁶² Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at [163]-[170]. This report has been published alongside this draft decision and can be found [here](#).

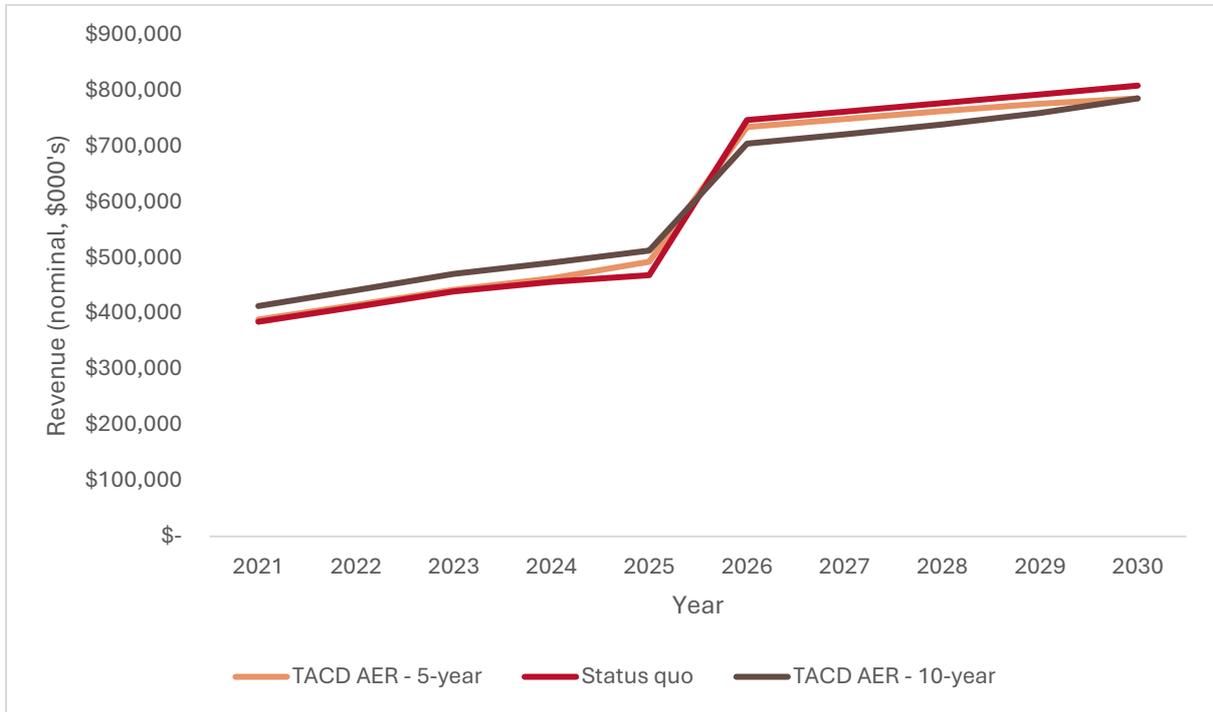
- 4.45 There are several design decisions that must be made when considering implementing a TACD. For the purposes of this modelling exercise, we considered the following:
- 4.45.1 Scenarios which modelled a TACD approach assumed this approach would have already been in place at the outset of DPP4, to assess their potential impacts in practice after any transitional mechanisms have been implemented.
 - 4.45.2 Our model used our DPP3 and DPP4 financial models' inputs from Vector. We wanted to proxy the outcomes we would observe in practice using actual inputs from a regulated supplier. We chose the EDB building block calculation as it is slightly more straightforward than for Chorus or Transpower, and a financial model already exists internally. We expect similar results to hold for other regulated suppliers. We chose Vector in particular as the percentage increase in its allowable revenues from DPP3 to DPP4 was broadly in line with the average in the sector.
 - 4.45.3 We modelled both a five, and a ten-year trailing average as both options were raised in submissions.
 - 4.45.4 Our model used AER's approach for the annual update:⁶³
 - 4.45.4.1 in each year, revising the building block for the cost of debt by using the updated value for the nominal return on debt;
 - 4.45.4.2 resmoothing the updated forecast price path, by calculating a new X-factor for the current year which achieves the constraint that the present values of the smoothed and unsmoothed revenue are equal; and
 - 4.45.4.3 calculating the actual revenues by:
 - (a) Treating the forecast revenue allowance in the first year as the actual revenue for the first year; and
 - (b) Rolling forward the first year's forecast revenue by the actual CPI and updated X-factors to determine actual revenues in subsequent years.

⁶³ We chose this as the AER's experience was the one mentioned most frequently in submissions, but we note there would be several options available for the annual update. For example, see [Orion "Submission – Fibre IM Review Issues Paper – Cost of Capital Issues \(Tranche 1\)" \(7 August 2025\)](#), at [3.4]-[3.5]; and [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 1.

- 4.45.5 Our model initially considered the revenue allowances that are determined from our ‘building blocks’ calculations and revenue path roll-forward. However, at the time of the DPP4 reset, we noted that revenues would be impacted by other aspects of our regime such as wash-ups from previous under- / over-recoveries, and incentive schemes. We noted this could have a material impact on the final revenues recovered from consumers and made our smoothing decisions at a “distribution revenue” level, which included these amounts. We have assumed they would be equivalent under each approach to the risk-free rate and have added them to the revenues under each scenario when considering the final price shock to consumers.
- 4.46 The total nominal revenues over the ten-year modelling period (2021 to 2030, ie EDB DPP3 and DPP4 period) would have been similar under all approaches, being:
- 4.46.1 \$6.04 billion under the status quo;
 - 4.46.2 \$6.00 billion under a five-year TACD; and
 - 4.46.3 \$6.03 billion under a ten-year TACD.⁶⁴
- 4.47 Figure 4.1 shows the resulting time series of nominal revenues for each approach (actual to 2025, forecast from 2026 onwards). This is revenue *excluding* wash-up drawdowns from previous under-recoveries and incentive amounts (both of which would be the same under each approach), and it is *prior* to smoothing.

⁶⁴ Once again, prior to any wash-up drawdowns for previous under- / over-recoveries, or incentive payments, due to the lack of data in later years. However, we note these would be the same under each approach. These figures are presented in total revenue terms. Under a present value calculation, the prevailing approach would have delivered the lowest present value of revenues.

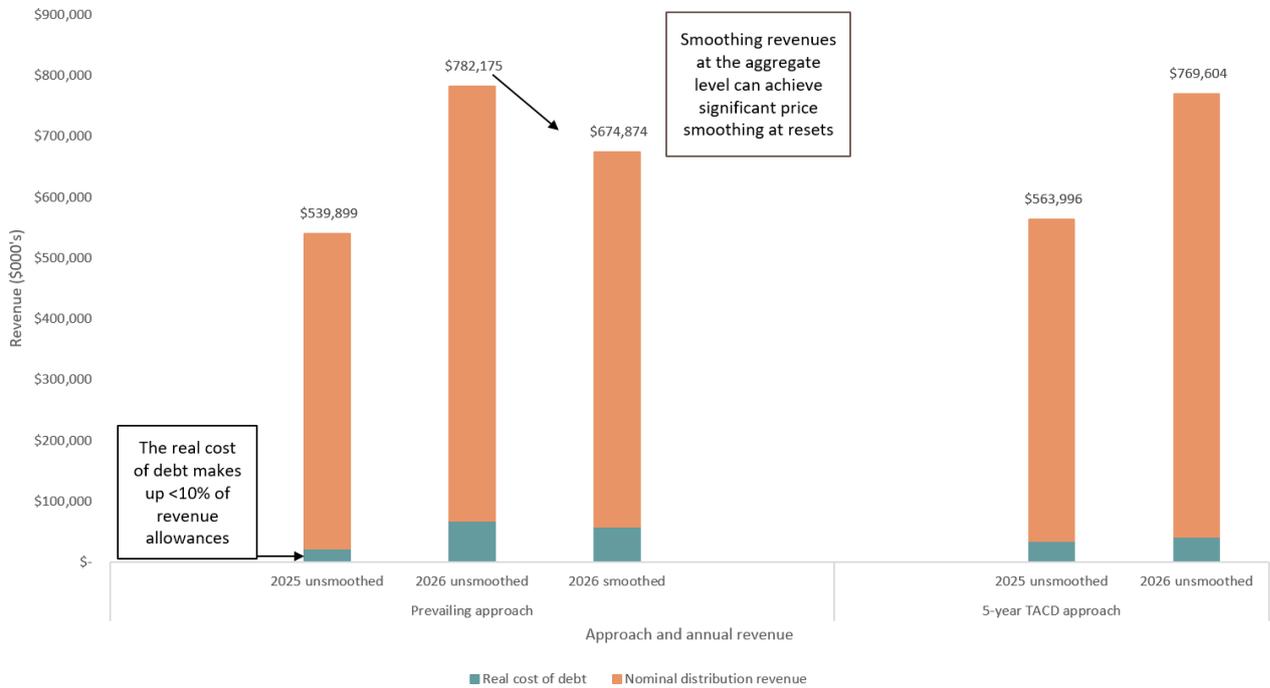
Figure 4.1 Revenue paths under various approaches to the risk-free rate (nominal, \$000's)⁶⁵



- 4.48 The figure shows that revenues under the status quo were lowest during 2021 to 2025. They then increased the most at the PQ reset and are forecast to be the highest in the period 2026-2030. The key point is that regardless of choice of approach to selecting the risk-free rate for the cost of debt, significant revenue changes were inevitable between regulatory periods.
- 4.49 Figure 4.2 demonstrates the contribution that the real cost of debt makes to the nominal revenues, and how this changed between the final year of DPP3 and the first year of DPP4 under each approach. These revenue figures include wash-up drawdowns and incentive amounts (both of which would be the same under each approach) and it also shows the effect of smoothing for the status quo.

⁶⁵ Due to the lack of data on incentive payments and wash-up drawdowns in later years, this revenue path is based simply on the revenues derived from our building blocks and revenue path roll-forward calculations. We note that these other components would be the same under each approach.

Figure 4.2 Real cost of debt as a proportion of 2025 and 2026 nominal distribution revenues under various approaches to the risk-free rate (\$'000's)⁶⁶



4.50 The figure shows that the revenue smoothing that we applied at the 2025 reset effectively mitigated a substantial portion of the increase in allowed revenues. Although these tools would have been available under a TACD approach as well, this figure demonstrates the flexibility to smooth revenues available under our current regime.

4.51 In our modelled scenarios, between 2025 and 2026, revenues increased from:

4.51.1 \$540 million to \$782 million under the status quo prior to smoothing, with the real cost of debt increasing by \$45 million;

4.51.2 \$540 million to \$675 million under the status quo post-smoothing, with the real cost of debt increasing by \$36 million (based on the proportion of unsmoothed revenues it reflects);

4.51.3 \$564 million to \$770 million under the five-year TACD, with the real cost of debt increasing by \$7 million; and

4.51.4 \$584 million to \$740 million under the ten-year TACD, with the real cost of debt decreasing by \$3 million.

⁶⁶ The real cost of debt is shown in Figure 4.2 rather than the nominal cost of debt because the nominal revenue calculation includes an offset for revaluations to the RAB. This also reflects the impact of revenue wash-up drawdowns and incentive payments, as we could make a reasonable estimate of these figures for the years 2025 and 2026 when setting DPP4.

4.52 The revenue figures and real cost of debt components are displayed below in Table 4.1 and Table 4.2.

Table 4.1 Increase in revenue from DPP3 to DPP4 under various scenarios (nominal, \$000's)

Approach	2025 revenue	2026 revenue	Increase
Prevailing approach – prior to smoothing	539,899	782,175	45%
Prevailing approach – post-smoothing	539,899	674,874	25%
Five-year TACD	563,996	769,604	36%
Ten-year TACD	583,978	739,531	27%

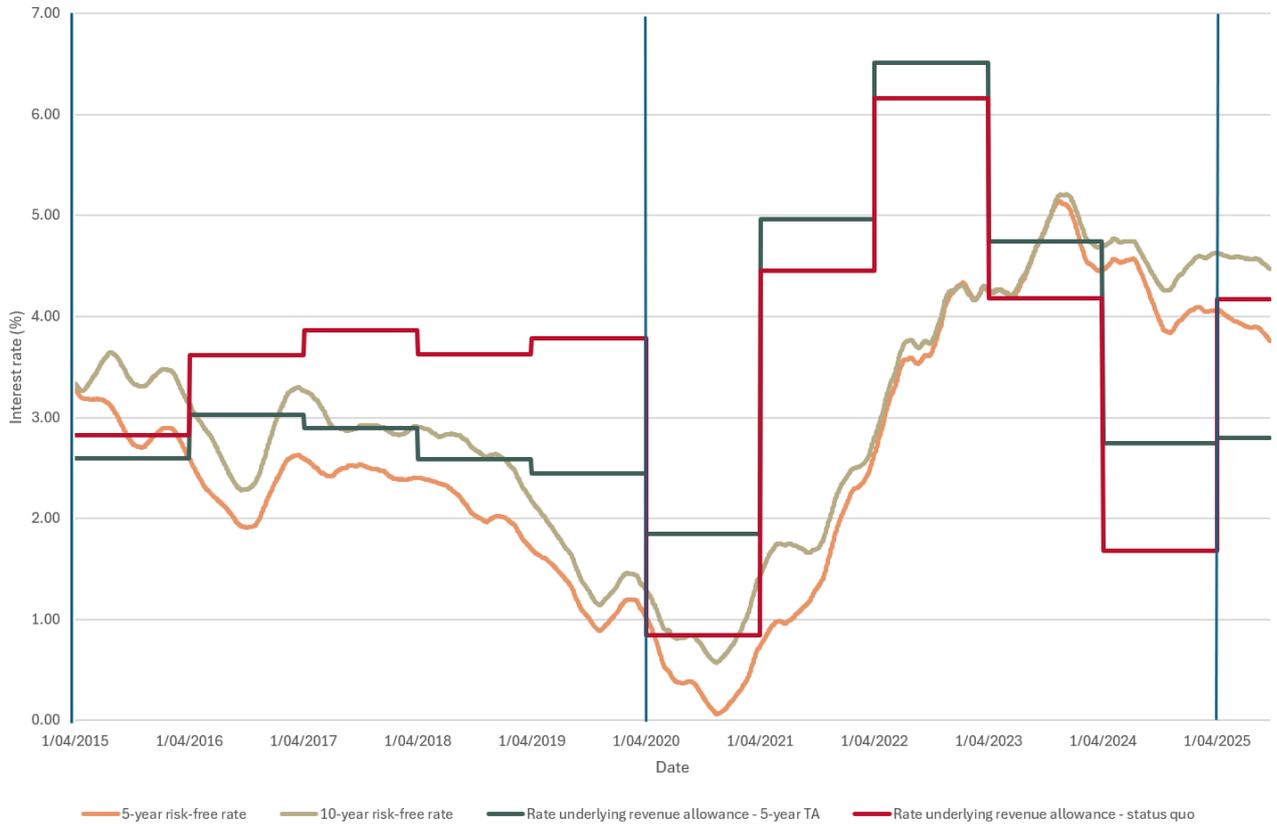
Table 4.2 Real cost of debt component of nominal revenues under various scenarios (\$000's)

Approach	2025	2026	Proportion of 2025 revenues (%)	Proportion of 2026 revenues
Prevailing approach (prior to smoothing)	22,687	67,807	4%	9%
Prevailing approach (post smoothing)	22,687	58,505	4%	9%
Five-year TACD approach	35,343	42,224	6%	5%
Ten-year TACD approach	46,048	42,796	8%	6%

4.53 Finally, in Figure 4.3 we illustrate the impact of inflation in the allowed cost of debt under different regulatory approaches. It shows a comparison of the current risk-free rates, and effective interest rates underlying the regulatory allowance under the prevailing approach and a five-year trailing average.⁶⁷

⁶⁷ The effective interest rate underlying the allowance is calculated by taking the regulatory cost of debt allowance, deriving an implied 'real' interest rate using the forecast of inflation in the current year, and then calculating a nominal interest rate based on actual inflation in that year. Due to data limitations in Bloomberg, we have used the RBNZ wholesale rates to proxy the risk-free rate that we would allow and have only presented the 5-year TACD series.

Figure 4.3 Risk-free rates and effective interest rates underlying the status quo and five-year trailing average approaches (%)



- 4.54 The figure shows that our treatment of inflation—which insulates both suppliers and consumers from inflation risk in the sense that they experience constant real prices throughout the regulatory period—means that there is only a small difference in the effective nominal interest rate driving revenues, between the prevailing approach and a 5-year trailing average.⁶⁸ This means that, because revenue adjusts to reflect actual inflation under each approach, a trailing average would also produce changing revenues when actual inflation differs from forecast.
- 4.55 It also shows that 10-year risk-free rates tend to be above the 5-year ones. Therefore, if a 10-year trailing average was adopted, we would expect higher average revenues and prices over time.

⁶⁸ For a more thorough explanation of this issue, refer to paragraphs 4.159 to 4.159.5 of the [Commerce Commission "Financing and incentivising efficient expenditure during the energy transition topic paper – Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#).

Our consideration of the approach to setting the risk-free rate for the cost of debt

- 4.56 In assessing the appropriate approach to estimating the risk-free rate for the cost of debt, we have been guided by the considerations identified in the Frontier Economics report. In particular, an assumed debt management strategy should:
- 4.56.1 be feasible to implement in practice;
 - 4.56.2 avoid exposing regulated suppliers to an excessive level of refinancing risk; and
 - 4.56.3 provide an effective alignment between the regulatory allowance and the costs incurred under the assumed strategy.
- 4.57 These considerations are central to ensuring regulated suppliers face appropriate incentives to invest. If suppliers cannot achieve reasonable alignment between their actual cost of debt and the regulatory allowance, they may be over- or under-compensated, weakening incentives to undertake efficient investment. Conversely, if alignment is achievable only by taking on unreasonable levels of refinancing risk, investment could be discouraged.
- 4.58 Having regard to these considerations, and the evidence before us, our current view is that the prevailing approach has operated effectively. Regulated suppliers have been able to manage their debt portfolios under the existing settings, and investment across regulated sectors remains strong. Since 2013, suppliers have invested more than \$21 billion in their networks, including substantial increases in expenditure in the current electricity lines regulatory periods.⁶⁹ We are not aware of regulated suppliers curtailing investment on the basis of how the cost of debt is calculated.
- 4.59 The subsections that follow set out how we have assessed the relevant evidence, and how these considerations have been applied within our decision-making framework in reaching our draft decision.

⁶⁹ This figure is presented in nominal terms and is based on the capex amounts disclosed by suppliers regulated under Part 4 of the [Commerce Act 1986](#) and Part 6 of the [Telecommunications Act 2001](#) over this timeframe. The figure in real terms (2025 dollars) will be greater. Not all regulated suppliers have been regulated under our regime for the entirety of this period (e.g. Chorus), so their actual investment in the networks will be greater than this figure.

Our consideration of the approach to the risk-free rate: price shocks

- 4.60 There was considerable stakeholder interest in the need to smooth revenues stemming from changes in the cost of capital. Some stakeholders commented in the context of the WACC more broadly, whilst some stakeholders suggested a TACD to address these concerns.

How we view the role of the WACC and revenue smoothing

- 4.61 The role of the WACC is to promote the appropriate incentives to invest in the network whilst limiting the ability of regulated suppliers to extract excessive profits, rather than to smooth revenues. Where competition is feasible, the WACC may also have a role in promoting competition.
- 4.62 We disagree with stakeholders who have suggested that our current approach leads to price volatility, which undermines incentives to invest. As noted in Paragraph 4.47, changing our approach to setting the risk-free rate would likely have a relatively modest impact on total revenues (though we expect higher prices over the long-run for a 10-year trailing average) over the long-term. We therefore do not consider that our approach undermines incentives to invest.
- 4.63 Revenue allowances are determined through a “building blocks” approach, where several components are added together (and then smoothed) to arrive at a total revenue allowance. The WACC is only one component of these overall revenue allowances, and our view is that we should consider the total revenue allowances rather than individual building blocks in isolation.
- 4.64 Furthermore, we have other tools available in the Commerce and Telecommunications Acts, to smooth revenues where appropriate, such as alternative rates of change or by altering depreciation which allow us to alter the profile of revenues in some instances.⁷⁰ We view use of these tools as the best approach to smoothing revenues.

⁷⁰ See s 53P(8)(a) of the [Commerce Act 1986](#) and s 197(2) of the [Telecommunications Act 2001](#).

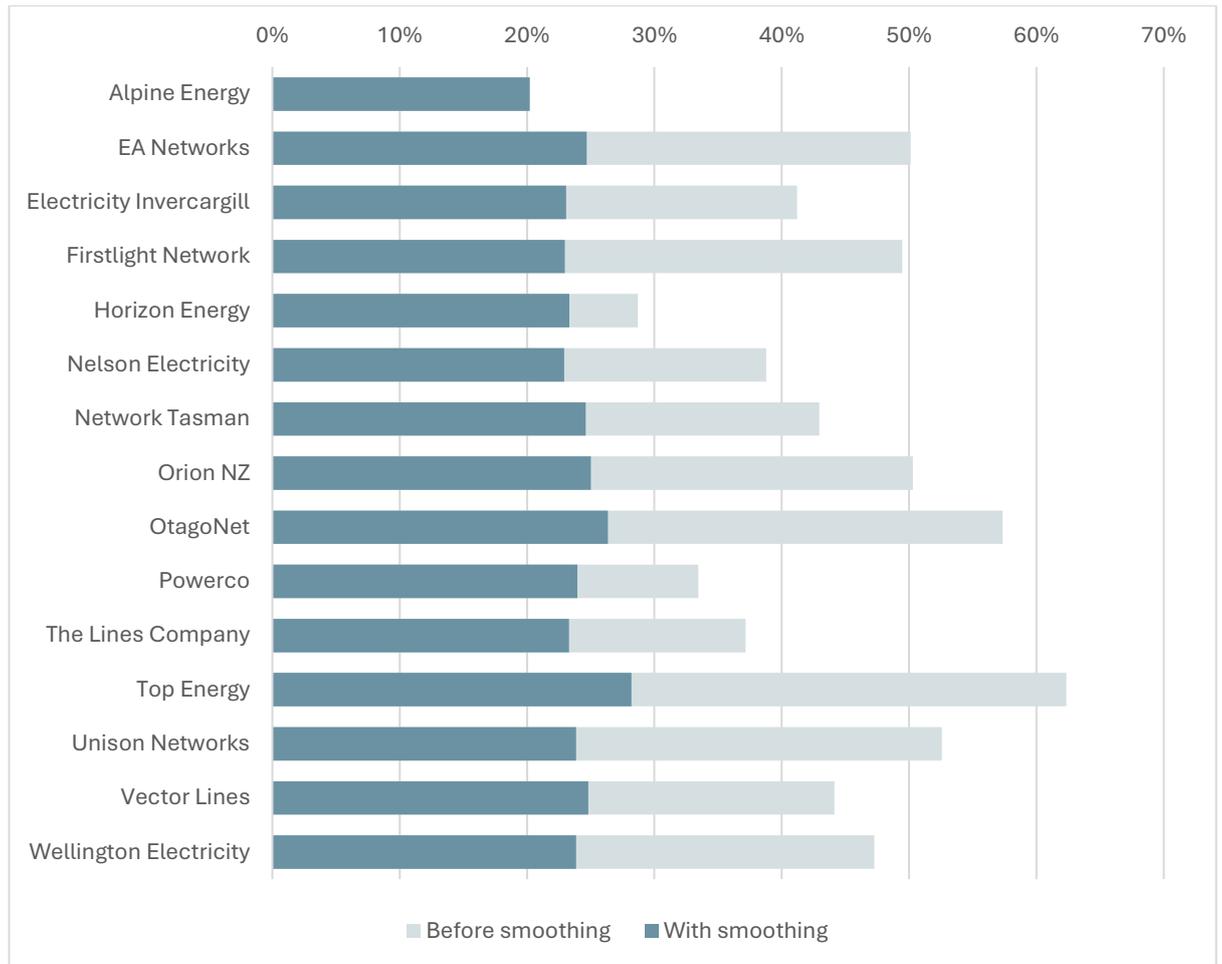
The limitations of a TACD to address price volatility

- 4.65 Whilst we acknowledge that in some circumstances there are some revenue smoothing effects inherent under a TACD (ie, when the WACC moves in the same direction as other components of the revenue allowances), we consider that the effects are more limited than some stakeholders believe for the following reasons:
- 4.65.1 Our regime targets a real rate of return, which means that the real return on debt is set at the reset and the nominal return on debt is the real return on debt adjusted for the difference between forecast and actual inflation. What this means in practice is that revenue throughout a regulatory period already varies with the change in the inflation component of the nominal return on debt - this variation to revenue doesn't wait until the next reset. As this process of adjusting revenue throughout a regulatory period would happen for both the current approach and with a TACD, the revenue smoothing effects associated with a TACD are relatively limited, because a trailing average only smooths out changes in the real risk-free rate, which makes up a relatively minor portion of revenues, as outlined in Figure 4.2.
- 4.65.2 Our draft decision to maintain the prevailing approach to the risk-free rate for the cost of equity is not dependent on our approach to the cost of debt. With leverages ranging from 23% (for Airports), to 41% (for EDBs, Transpower, and GPBs), the largest portion of any step-changes in the prevailing real risk-free rate at resets would remain unaffected by adopting a TACD.
- 4.65.3 Several stakeholders, such as Chorus and NZAA preferred a shorter length of the trailing average. To the extent that a TACD does smooth revenues by averaging out real interest rates over a longer period of time, a shorter averaging period will reduce this effect.
- 4.65.4 As described in Paragraph 4.51, we have alternative means of addressing price shocks at resets, such as alternative X-factors. These were used at the DPP4 reset to reduce increases in revenues recovered by EDBs. For example, in Vector's case, the increase in distribution revenue (accounting for the building blocks calculation, and also wash-up drawdowns and incentive payments) was reduced from 45% to 25% with the use of our alternative tools to smooth revenues. Similar reductions occurred across other EDBs, as demonstrated below in Figure 4.4.⁷¹

⁷¹ [Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Final decision – Attachment F: Revenue path" \(20 November 2024\)](#), figure F8. These figures reflect the EDB allowed revenues after accounting for wash-up drawdowns, incentive amounts, and other recoverable costs which had the effect of reducing the price shock in percentage terms at the DPP4 reset. As a result, these figures will be lower than the changes in allowable revenues discussed below.

4.65.5 In the DPP4 reset which featured increasing regulatory asset bases, expenditure allowances, and inflation (all of which would be identical under a TACD), our alternative X-factor approach achieved a substantial reduction in the price shock between regulatory periods. These tools would also be available under a trailing average but demonstrate that our regime already contains a substantial degree of flexibility to smooth prices.

Figure 4.4 Increase in distribution revenue from the final year of DPP3 to the first year of DPP4



4.66 Overall, our view is that, in the time period considered:

4.66.1 there is some revenue smoothing effect of adopting a trailing average (either a five, or a ten-year). However, where appropriate to do so, we have other tools that can smooth revenues which are simpler to administer. We used these tools at the DPP4 reset; and

4.66.2 DPP4 was a case where interest rates shifted materially from the prior regulatory period, at the same time as there were large increases in expenditure allowances and the RABs. Our view is that this is likely to be at the higher end of the potential smoothing effects of a TACD. The resulting revenues under each scenario were still broadly similar over the entire modelling period, and the smoothing effects of adopting a TACD rather than a prevailing approach were smaller than what our other tools achieved at the DPP4 reset. However, we do acknowledge that these tools could also be used under a trailing average approach.

Our consideration of the approach to the risk-free rate: statutory purpose - incentives to invest

- 4.67 Our view is that our draft decision promotes the statutory purposes as regulated suppliers can broadly match our regulatory allowance, achieving the necessary alignment to promote incentives to invest.
- 4.68 Although actual interest rates on new borrowing can move away from the regulatory allowance throughout the regulatory period, the regular resetting of prices (and the allowed cost of debt) should allow changes in financial markets to flow through to the regulatory allowance relatively quickly, minimising these mismatches.
- 4.69 This may not be the case under alternative approaches such as a simple ten-year TACD, under circumstances where interest rates shift materially and the financing / expenditure profile differs from the constant 10% assumed, due to the long length of the averaging period assumed. Our current settings, which this draft decision maintains, have delivered significant amounts of investment in regulated suppliers' networks. We consider this supports the view that our approach incentivises investment and does not indicate shortcomings with our approach.
- 4.70 We consider that both the prevailing approach and a simple ten-year TACD approach can promote the statutory purposes by incentivising investment under stable interest rates and financing / expenditure conditions. In their recent discussion paper, the AER note that when these conditions are not met, there can be limitations on how well their existing, simple, ten-year approach to the TACD promotes these incentives.^{72, 73}
- 4.71 We agree that there are limitations to the TACD when deviations from these stable conditions occur. This happens as the regulatory allowance does not match the actual cost of debt faced for financing new expenditures, as the profile of expenditures (and the required financing, ie, the portion of a suppliers' total debt book exposed to each year's interest rate) do not align with the 10% financing profile assumed under a simple TACD.
- 4.72 As a result, there will be a mismatch between the weighting assigned to a given year's interest rates in the trailing average, and the portion of their debt that faces that interest rate.

⁷² [Australian Energy Regulator "Rate of Return Instrument – Review discussion paper" \(August 2025\)](#), at 23-24.

⁷³ The Frontier Economics Report also notes that in the case of material 'lumpy' capex, a weighted trailing average would be required to match the regulatory allowance to the benchmark efficient costs that would be incurred.

- 4.73 These mismatches will be most pronounced when prevailing interest rates deviate from the trailing average allowance, and when the expenditure / refinancing profiles deviate from the annual 10% assumed under a simple ten-year TACD.
- 4.74 This would be the case now under DPP4 and RCP4, where interest rates at which suppliers finance their debt raising are currently higher than those that would result from a ten-year trailing average. This coincides with the current material uplift in investment requirements. The AER is currently considering whether an appropriate weighting mechanism which provides greater weight to more recent interest rates may address this problem.
- 4.75 Although the Frontier Economics report considers this to be simple, the AER's recent discussion paper highlights that there is uncertainty about just how complex this issue can be. On this basis, we do not consider this to be a settled issue, and we are uncertain that we could simply and effectively implement such a weighting mechanism if we were to adopt a TACD. We consider a weighted TACD to be an untested idea and are unsure at this stage whether adopting such an approach would promote the statutory purposes by incentivising investment better than a prevailing approach does in practice. As outlined in this chapter, we consider our draft decision promotes incentives to invest.
- 4.76 On balance, we do not consider that adopting a ten-year TACD would better promote the appropriate incentives to invest than the prevailing approach.
- 4.77 Adopting a five-year trailing average could mitigate our concerns about incentives to invest in two ways:
- 4.77.1 The greater the deviation between prevailing interest rates and the TACD allowance, the greater the mismatches will be. By giving a greater weighting to more recent observations (due to using fewer years when calculating the average), changes in interest rates will be faster to be reflected in the TACD allowance, minimising these mismatches; and
- 4.77.2 The greater the deviation between the expenditure / financing profiles from that assumed under the TACD, the greater these mismatches. With a shorter trailing average, each year receives a greater weighting, and "lumpy" or increasing capex requirements will be less pronounced than they will under a ten-year TACD. For example, when suppliers are refinancing 20% of their debt book in each year, raising an additional 5% of their debt book for new expenditure requires a smaller portion of their total debt book exposed to any mismatch than it would if they were refinancing 10% of their debt book in each year under a ten-year trailing average.
- 4.78 With the explanation above in mind, we consider that a prevailing approach and a five-year TACD may perform quite similarly at promoting incentives to invest, as both would allow for current interest rates to be more closely matched to the regulatory allowance.

- 4.79 However, shortening the length of the trailing average raises other concerns which are set out below. We welcome stakeholder feedback on the concerns raised, notably hedging and refinancing risk.
- 4.79.1 **Refinancing risk:** If regulated suppliers must shorten their debt portfolios to match a five-year trailing average, this may introduce a level of refinancing risk they are not comfortable with. As we noted in our recent confidential debt survey, in some cases, this weighted average original tenor extends to 7.5 – 10+ years.⁷⁴ Under our current approach, regulated suppliers can maintain a longer-tenor debt portfolio while being able to materially hedge to match the regulatory allowance.
- 4.79.2 **Hedging:** If regulated suppliers would like to continue issuing longer-term debt to manage refinancing risk under a five-year TACD, it is unclear whether a matching between the regulatory allowance and actual debt costs can be achieved. For example, hedging the risk-free rate exposure to a single, prevailing rate which is current at the time of hedging is manageable. To the best of our knowledge, financial instruments which hedge to an average of previous rates do not exist. Alternatively, suppliers could simply hedge the portion of their debt which is maturing in each year to the current five-year risk-free rate, but this introduces a mismatch between the portion of their debt exposed to that risk-free rate, and the weighting it is given in the regulatory allowance.
- 4.80 Our preliminary view is that this level of refinancing risk would not be considered prudent by some of the larger regulated suppliers. The AER has adopted a ten-year TACD, and their regulated suppliers tend to follow their approach as noted in the Frontier Economics report.⁷⁵ As outlined in paragraph 4.56, interest rates on shorter-term debt tend to be lower than interest rates on longer-term debt. Despite being able to issue shorter-term debt to take advantage of typically lower interest rates, many choose not to. Perhaps this is because they value the alignment between their debt costs and the regulatory allowance, but it may also introduce a level of refinancing risk they are not comfortable with. Furthermore, as noted in the Frontier Economics report, every Australian regulator that has adopted a trailing average approach uses a 10-year term.⁷⁶
- 4.81 However, we also acknowledge that some suppliers perceive there to be a risk in needing to hedge a large volume of debt to match our regulatory allowance. This could be avoided by adopting a TACD, even if shortening the TACD introduces some level of refinancing risk.

⁷⁴ [Commerce Commission "Cost of capital topic paper – Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), at figure 3.1.

⁷⁵ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at [156]. This report has been published alongside this draft decision and can be found [here](#).

⁷⁶ *Ibid*, at [7].

- 4.82 If it was the case that five years was an appropriate original tenor of debt for regulated suppliers, we consider that shortening the length of the trailing average would mitigate our concerns about the incentives to invest under a TACD and the prevailing and trailing average approaches would be roughly equivalent in this regard.
- 4.83 However, if the appropriate original tenor exceeds five years and a five-year TACD introduces untenable refinancing risk, or material mismatches between suppliers' actual debt costs and the regulatory allowance, this would undermine these incentives to invest and thus not promote the statutory purposes.
- 4.84 Overall, though the position is finely balanced, our view is that our draft decision best promotes incentives to invest, and adopting a trailing average would not materially improve incentives to invest.

Our consideration of the approach to the risk-free rate: statutory purpose - limiting excessive profitability

- 4.85 We consider that our draft decision to retain the prevailing approach better promotes the statutory purposes by limiting suppliers' ability to extract excessive profits, relative to a ten-year TACD.
- 4.86 Interest rates on debt with longer maturities tend to be higher than those on shorter-term debt. Whilst this is not always the case, the ten-year risk-free rate has exceeded the five-year risk-free rate by 0.46% on average since 2010.⁷⁷
- 4.87 One benefit of the prevailing approach is that regulated suppliers can hedge their exposure to a shorter-term interest rate, which means that consumers will be exposed to lower prices on average than they would under longer-term rates being used.
- 4.88 If we were to adopt a ten-year TACD, and suppliers wanted to match the regulatory allowance on their existing debt portfolio, this would require that they roll over 10% of their debt portfolio in each year (commensurate with the weighting that each year's interest rate receives in the allowance). This would require the chosen term on their debt issued, and allowed for in the TACD, to be 10 years.
- 4.89 Given longer-term interest rates tend to be greater than shorter-term interest rates, adopting a ten-year trailing average is likely to result in higher prices over the long-term for consumers.⁷⁸ This is because the bonds we would use to estimate the RFR would more likely be ten-instead of five-year bonds, which would result in a higher risk-free rate, and ultimately higher allowed revenues and prices.

⁷⁷ Based on the RBNZ B2 wholesale interest rate series, difference between the five-year and ten-year NZ Government bond yield, averaged from 5 January 2010 to 18 September 2025.

⁷⁸ Although our modelling exercise shows a higher amount of revenue under the prevailing approach, this covers one discrete period with a particular set of interest rates. It is generally accepted that longer-term debt tends to command a higher return than shorter-term debt, so we expect a ten-year TACD to result in higher prices on average over the long-term.

- 4.90 Furthermore, based on our confidential debt surveys, many of our regulated suppliers issue debt with a maturity shorter than the current allowance (which is typically five years for EDBs / Transpower / airports, aligning with the length of their regulatory periods).⁷⁹ If they continue to issue shorter-term debt, whilst being compensated for longer-term debt under a ten-year TACD, this would likely result in them earning excessive profits.⁸⁰
- 4.91 On balance, we consider our draft decision promotes the statutory purpose by limiting suppliers' ability to extract excessive profits better than a ten-year TACD does.
- 4.92 As five years is roughly consistent with the term that many regulated suppliers are currently compensated for, we expect that prices, and limits on excessive profitability, under a five-year TACD would be similar to those under a prevailing approach.

Our consideration of the approach to the risk-free rate: promoting workable competition in telecommunications markets

- 4.93 In the context of Fibre, s 166(2) of the Act requires that we make the decision that best gives or is likely to best give effect to the s 162 purpose, and where relevant, the promotion of workable competition in telecommunications markets for the long-term benefit of end-users of telecommunications services. As we have set out previously, we consider there is a complementary relationship between s 162 and s 166(2)(b).⁸¹
- 4.94 As set out above, we consider that both a prevailing and a trailing approach to the cost of debt promote competition in accordance with s 166(2)(b). The prevailing approach is more likely to reflect the current interest rate conditions that new entrants must finance themselves at and lower barriers to entry, promoting competition. However, this advantage may be mitigated by:
- 4.94.1 new entry at the infrastructure competition layer is likely infrequent, even in the absence of barriers to entry;
 - 4.94.2 once in the market, firms are likely to stagger their debt issuances to mitigate refinancing risk, and will face a cost of debt that resembles a trailing average approach; and
 - 4.94.3 when interest rates are relatively stable, the allowed cost of debt under each approach will be similar, and both approaches would be similar at promoting workable competition in telecommunications markets.

⁷⁹ [Commerce Commission "Cost of capital topic paper – Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), at figure 3.1.

⁸⁰ For example, see: [Johnstone et al. "2026 Rate of Return Instrument review – Eligible Experts' joint report" \(report for the Australian Energy Regulator, 23 November 2025\)](#), at figure 8. We note that there may have been other factors which contributed to this outperformance such as an extended period where the trailing average allowance was greater than the prevailing cost of debt.

⁸¹ [Commerce Commission "Fibre input methodologies: Main final decisions – reasons paper" \(13 October 2020\)](#), at [2.233].

- 4.95 Therefore, both a trailing average and a prevailing approach to the cost of debt can promote s 166(2)(b). However, for the reasons set out above, our view is the prevailing approach best gives effect to the purpose in s 162 of the Act. Overall, then, the prevailing approach best gives effect to s 166(2) of the Act.

Our consideration of the approach to the risk-free rate: regulatory complexity and cost

- 4.96 In this section we consider the regulatory complexity and cost that would result from a change from the prevailing approach to a TACD approach.
- 4.97 In particular, we have identified three aspects relating to regulatory complexity that must be considered if a TACD was adopted:
- 4.97.1 the initial design of the trailing average and how it interacts with our existing regime;
 - 4.97.2 the ongoing administrative effort of maintaining a TACD if adopted; and
 - 4.97.3 the design of any transitional arrangements to mitigate windfall gains / losses to suppliers and consumers.
- 4.98 The necessary transitional arrangements is a complex topic and depends on the design choices we make relating to the trailing average, as well as regulated suppliers' existing debt and hedging arrangements. We discuss the transitional arrangements below and identify several questions we would welcome stakeholders' views on.
- 4.99 As set out below, we find that these factors would increase regulatory complexity and costs, and in ways which, while not insurmountable, are not simple or trivial. We would need to consider the benefits of adopting a trailing average to be material enough to outweigh this complexity, which we currently do not.
- 4.100 While our draft decision is to maintain the prevailing approach as it on balance better promotes the statutory purpose, this draft decision is supported by the increase in regulatory complexity and costs that would result from a change to a TACD approach.

Regulatory complexity - Interactions between our existing regime and adopting a trailing average

- 4.101 The WACC features in many areas of our regime. Outside of setting the return on regulated suppliers' RABs as part of their revenue allowances, it is used in many present value calculations, and as a benchmark for profitability assessments. Some of these uses are codified in the IMs, whereas some are not.
- 4.102 If a trailing average were adopted, we would need to consider amending the following aspects of our regime:
- 4.102.1 **the building blocks calculation**, and the return on debt portion of revenue allowances;

- 4.102.2 **other price path features**, including any annual update, wash-up drawdown, and revenue path roll-forward. This is complicated further by the fact that different sectors have slightly different existing treatments of these processes;
- 4.102.3 **present value calculations**. Many aspects of our regime result in cash flows being recovered at differing points of time from when the right to recover them has accrued. In these instances, the WACC is used to preserve the present value of these cash flows to reflect the time value of money. This is further complicated by the fact that present value calculations for cash flows occurring in the future require a WACC that is set on a forward-looking basis, which is not what a trailing average provides. We have identified several aspects of our regime that would need to be updated if a trailing average was adopted. They are:
- 4.102.3.1 How we determine several adjustment terms within the opex IRIS calculations;
 - 4.102.3.2 How we set the capex retention factor to provide an equivalent incentive between making savings in opex and savings in capex;
 - 4.102.3.3 Price path smoothing, where revenue can be bought forward or deferred into later years;
 - 4.102.3.4 Wash-up accruals, where revenue allowances can be under- / over-recovered and corrected for in later years; and
 - 4.102.3.5 Cases where incorrect amounts of revenue has been recovered in previous years. For example, Alpine Energy Limited has recently discovered an error in historic information disclosure data which led to customers being charged the incorrect amounts, and a remediation payment was made.
- 4.102.4 **other places in the IMs**, such as regulatory tax allowances, notional deductible interest, and the annual benefit of Crown financing (in Chorus' case) which make use of the cost of debt and would need to be updated; and
- 4.102.5 **profitability assessments**. The WACC is often used as a benchmark for profitability when doing profitability assessments or assessing airports targeted profitability at price-setting events. Historically, we have typically used the WACC based on the prevailing approach as the appropriate benchmark. We would need to consider whether adopting a trailing average approach changed our view on the appropriate benchmark.
- 4.103 In many cases, there will be a trade-off between the simplicity and accuracy of our approach. For example, wash-up accruals must be rolled forward at the WACC. The difference in revenues between using the WACC as fixed at the beginning of the regulatory period, and the WACC that is calculated at an annual update may be immaterial. We would welcome stakeholders' views on how they see this trade-off, and the level of detail at which these issues must be addressed.

Regulatory complexity – ongoing maintenance of a TACD

- 4.104 Stakeholders who commented on the design of the trailing average, preferred some form of an annual update to the cost of debt and the associated revenue allowance.
- 4.104.1 Incenta (on behalf of Chorus) submitted that there should be an update to the allowed cost of debt as new observations become available, either through updating the revenues within the period, or through a wash-up mechanism, or through a combination of both.⁸²
- 4.104.2 Clarus pointed to previous submissions or reports that recommended annual updates to the cost of debt, or other tools such as wash-up mechanisms could be considered.⁸³
- 4.104.3 Transpower submitted that the TACD should include an annual update to the maximum allowable revenues.⁸⁴
- 4.105 An annual update to the cost of debt, rather than an end-of-period wash-up mechanism, would likely enhance any revenue smoothing effects of the TACD, although it comes with administrative costs.
- 4.106 We agree with stakeholders that after the initial implementation, the ongoing maintenance of an annual update to the revenue path would be manageable. However, it is likely to come with some amount of administrative burden. For example:
- 4.106.1 while some stakeholders suggest that we could use the current estimates of the WACC, calculated annually for information disclosure purposes, these occur on a different timeline than the current price-quality WACC determinations. We consider it would be useful to have the most up-to-date information when setting revenue limits, so would likely have to publish an additional WACC determination in each year.
- 4.106.2 an annual update to the cost of debt would also require a recalculation of the revenue limits in each year.
- 4.107 We note that some, but not all our regulated suppliers currently perform annual wash-up calculations which could include an annual update. However, each sector currently has a different process for rolling forward the revenue path, and not all have an annual update that this process could fit into. For example, Transpower does not recalculate any of its revenue limits within-period, and we would need to introduce a new process to accommodate an annual update to its cost of debt.

⁸² [Incenta Economic Consulting "Issues relating to common WACC elements" - 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#), at 6.

⁸³ [Clarus "Fibre input methodologies review 2027: Clarus views in response to issues paper \(Tranche 1\)" \(7 August 2025\)](#), at 2 and 4.

⁸⁴ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 1.

- 4.108 Whilst some of the administrative burden involved with adopting a trailing average is borne by the Commission, regulated suppliers may also be impacted if an annual update to the revenue allowances must be introduced. We would welcome stakeholders' feedback on how we could best manage the administrative burden of implementing a trailing average.

Regulatory complexity – transitional arrangements if a TACD is adopted

Transitional arrangements – why transitional arrangements may, or may not be necessary

- 4.109 Although our draft decision is to maintain a prevailing approach, if we were to change to a TACD we would need to consider whether a transitional period / approach is needed, and if so, how that might be designed. As noted in our issues paper, this would require decisions on the details of any such transition.
- 4.110 The concerns we have with transitional arrangements are potential windfall gains or losses arising where the new allowance at transition does not align with the actual financing outcomes under existing debt and hedge positions. Our approach to a transitional period / system would be to avoid, to the extent possible, windfall gains and losses (and we would need to consider how to quantify any windfall gains and losses).
- 4.111 We have identified several considerations that would arise if a TACD were adopted as our final decision, and we set out our initial views on the associated transitional arrangements below and invite stakeholders' feedback.
- 4.112 Our issues paper set out some points on transitional arrangements. Stakeholders' views on these were mixed. For example:
- 4.112.1 Transpower suggested that adopting a TACD straight away at the outset of its next regulatory period would be sufficient as their hedging arrangements would expire;
- 4.112.2 2degrees and Incenta (on behalf of Chorus) noted the importance of avoiding windfall gains or losses in the transition^{85 86 87}; and
- 4.112.3 ENA submitted that they support some form of transitional arrangements but are open to a discussion on whether the recent high and low interest rates result in a reasonable average rate.⁸⁸

⁸⁵ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 3.

⁸⁶ [2degrees "2degrees response to Commerce Commission Fibre input methodologies review: Issues paper" \(August 2025\)](#), at 6.

⁸⁷ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#), at 6.

⁸⁸ [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 5.

- 4.113 Of the Australian regulators who adopted a TACD, their approach to transitional mechanisms were mixed. For example:
- 4.113.1 ESC and ESCOSA adopted a TACD with no transitional mechanisms.⁸⁹
 - 4.113.2 the QCA had a default position of no transitional mechanisms, with the option to apply for one when such a change would result in “material and adverse impacts” for the regulated supplier.⁹⁰
 - 4.113.3 the AER implemented a transitional mechanism, which recognised that many regulated suppliers were following a prevailing approach, and needed time to “build up” a trailing average portfolio.⁹¹ This involves taking a weighted average between the previous approach and the TACD approach, where the weighting of the TACD increased by 10 percentage points in each year (consistent with the portion of debt which must be issued/ rolled over in each year under a ten-year TACD). This may be a reasonable approach were we to implement a transitional mechanism.⁹²
- 4.114 Our initial view is that our existing trailing average approach to the debt premium, and associated practices of regulated suppliers may simplify the transition, though the wide range of debt management strategies does present challenges.
- 4.115 Under our regime, each regulated supplier adopts their own debt management strategy, as they are free to do under incentive-based regulation. Our initial view is that this makes it difficult to design a transitional mechanism which completely avoids windfall gains or losses to suppliers, as there will not be one single approach which accommodates every supplier’s unique debt management strategy and existing debt arrangements.
- 4.116 Our regulatory regime does incentivise certain behaviours, and regulated suppliers who follow these incentives should not be advantaged or disadvantaged due to changes to the regulatory regime. Exposing suppliers to windfall losses due to regulatory change can undermine confidence in the regime and incentives to invest.
- 4.117 If we were to move to a different approach, we may need to have transitional arrangements to ensure the move to a new approach was smooth. In designing the transitional arrangements, we would expect a large part of focus would be to transition to the new approach in a way that avoids (as far as possible) windfall gains or losses for those who have followed our assumed debt management strategy and have hedging arrangements in place.

⁸⁹ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at Table 1. This report has been published alongside this draft decision and can be found [here](#).

⁹⁰ Ibid, at [115].

⁹¹ Ibid, at [113].

⁹² Ibid, at [113]-[115].

- 4.118 However, we would likely pay some attention to other regulated suppliers who have adopted other debt management strategies. While they are free to deviate from our assumed approach if they are willing to bear any upside or downside impacts, the decision to do so is made in the context of the current regulatory settings. Such a deviation, and the resulting risks may be tolerable to shareholders under one approach to the risk-free rate, but intolerable under another.
- 4.119 Under our current approach, we recognise that regulated suppliers may wish to issue debt on a staggered basis to mitigate refinancing risk. This is reflected in our trailing average approach to the debt premium.
- 4.120 Our trailing average approach to the debt premium assumes the original tenor of debt issued is five years. However, we do provide a separate term credit spread differential (TCSD) allowance to compensate suppliers who wish to issue longer-term debt to manage refinancing risk, out to a ten-year original tenor.
- 4.121 Under this approach, we further assume that regulated suppliers will enter into interest rate swap contracts, to align the risk-free rate component of their debt with the prevailing rate at the time of setting the allowance.
- 4.122 Therefore, the two key scenarios we would consider when designing transitional arrangements would be:
- 4.122.1 a regulated supplier who issues debt on a staggered basis in line with a five-year trailing average, and uses swap contracts to hedge their risk-free rate to the regulatory allowance; and
 - 4.122.2 a regulated supplier who issues debt on a staggered basis in line with a trailing average longer than five years and uses swap contracts to hedge their risk-free rate to the regulatory allowance.
- 4.123 In either case, the appropriate transitional mechanism depends on the selected term of the trailing average, the tenor of the suppliers' debt, and the existing swap contracts in place.
- 4.124 For example, under a five-year staggered issuance, a regulated supplier's actual cost of debt would be commensurate with a five-year TACD prior to accounting for any hedging arrangements. If a five-year TACD was adopted, we could simply implement it at the beginning of the next regulatory period, as their current hedging arrangements expire and their actual debt costs align with the regulatory allowance.
- 4.125 In the case of a ten-year staggered issuance, a regulated supplier's actual cost of debt would be commensurate with a ten-year TACD prior to accounting for any hedging arrangements. However, these hedging arrangements may extend over multiple regulatory periods.
- 4.126 For example, when a supplier issues ten-year debt at the beginning of a five-year regulatory period and carries out our assumed hedging strategy, they will:
- 4.126.1 immediately issue the debt, having to pay the ten-year fixed rate;

- 4.126.2 immediately Enter into Swap Contract 1, to receive the ten-year fixed rate (netting off the ten-year fixed rate payable on the debt), and pay the floating rate for 10 years;
 - 4.126.3 immediately Enter into Swap Contract 2, to receive the floating rate (netting off the floating rate payable under Swap Contract 1), and pay the five-year fixed rate (commensurate with the regulatory allowance in the first regulatory period) for five years.
 - 4.126.4 note that at the end of the first regulatory period, Swap Contract 2 will expire, while Swap Contract 1 will still be in place for a remaining five years;
 - 4.126.5 enter into Swap Contract 3 at the beginning of the second regulatory period, to once again receive the floating rate (netting off the floating rate payable under Swap Contract 1), and pay the new five-year fixed rate (commensurate with the regulatory allowance for the second regulatory period).
- 4.127 In this case:
- 4.127.1 adopting a ten-year TACD with no transitional mechanism at the outset of the second regulatory period would result in Swap Contract 1 having five years left to run. This would create a mismatch between their actual debt costs and the regulatory allowance.
 - 4.127.2 adopting a ten-year TACD with no transitional mechanism at the outset of the third regulatory period would allow Swap Contract 1 to expire. This would result in the supplier's actual debt costs aligning with the regulatory allowance.
- 4.128 Further complicating the need for transitional arrangements is a potential mismatch between suppliers' current chosen term, and the length of the trailing average.
- 4.129 For example, whilst the cost of debt for a supplier issuing ten-year debt on a staggered basis may align with a ten-year TACD allowance once hedging arrangements expire, they would not align with a five-year TACD.
- 4.130 However, we consider that if any transitional arrangement had a large lead in period (i.e., a change to our approach was signalled far enough in advance), suppliers would have the opportunity to change their current debt management practices to be more closely aligned with the new approach. For example, they could alter the term to maturity on any debt that matures between now and the implementation of a trailing approach, to match the assumed term. Some mismatches between their actual debt costs and the regulatory allowance would likely still persist as they may not be able to (or decide not to) transition their entire debt book to align with the new assumed tenor of debt prior to the implementation date, but this could assist in mitigating any mismatches to some degree.

Transitional arrangements - Consultation questions

- 4.131 As noted above, the appropriate transitional arrangements depend on both the design of the trailing average, and regulated suppliers' existing debt arrangements.
- 4.132 If we were to adopt a trailing average as our final decision, we would need to consider what, if any, transitional arrangements were necessary.
- 4.133 In doing so, information on regulated suppliers' existing debt arrangements would be helpful.
- 4.134 We are interested in stakeholders' views on the following two questions.
- 4.134.1 If we were to adopt a TACD, the chosen length will differ from some suppliers' current length of their staggered issuances, due to the wide range of chosen debt management strategies. Would it be reasonable, from the perspective of mitigating mismatches between suppliers' actual debt costs and the regulatory allowance upon implementation date, to begin adopting a TACD in line with the length assumed prior to the implementation date? For example, by replacing ten-year maturity debt with five-year maturity debt as it matures (or vice-versa, depending on the chosen length of the trailing average).
- 4.134.2 Depending on stakeholder views on the question above, and current hedging arrangements, could adopting a TACD with no transitional mechanism be a reasonable approach to avoid the regulatory complexity associated with an AER-style transition?
- 4.135 If, as a result of submissions on our draft decision, our final decision included a change to adopt a trailing average approach, we would also consider transition mechanisms. In doing so, we would expect to consider the timing of suppliers' hedging arrangements relative to the end of the current regulatory period. If required, we would request this information from suppliers.
- 4.136 We consider that the arguments presented above in the context of regulatory complexity apply quite similarly for both a five-year, and ten-year TACD. In particular, that:
- 4.136.1 although our approach already includes a five-year trailing average debt premium which may simplify the transition, many of the larger regulated suppliers issue longer-term debt; and
- 4.136.2 these suppliers would have to progressively shorten their debt portfolios as existing debt matured to match a five-year TACD. Our view is that this poses similar challenges when transitioning to a five-year TACD as introducing a ten-year TACD does for suppliers who issue shorter-term debt.

Other submissions we have considered

- 4.137 In response to our Issues paper, stakeholders raised a wide range of other points. We have responded to each of them in Table 4.3.

Table 4.3: Response to outstanding submission points

Argument	Response / reasoning
A TACD would be more reflective of actual financing costs, and the debt management strategies employed by firms in the absence of regulation to deliver the returns their investors demand. ⁹³	We consider that recognising the regulatory context is important. We must set the parameters of the cost of capital in such a way that promotes the statutory purpose, and this need not align with what we observe in unregulated settings.
A TACD would mitigate the consequences of a single measurement error. ⁹⁴	We consider that the risk for measurement error is low, and on a forward-looking basis, market values provide the best information about market participant’s expectations.
The current approach assumes all debt is refinanced leading up to a new regulatory period, which is inconsistent with actual financing practices. ⁹⁵	We disagree. Our current hybrid approach allows for staggered debt issuance to mitigate refinancing risk, as reflected in our trailing average debt premium. This view is supported by Frontier Economics’ report which states that the hybrid approach mitigates refinancing risk. ⁹⁶
The current approach results in excessive repricing risk due to the large amount of debt repriced leading up to a new regulatory period. ⁹⁷	To the extent that we believe the regulatory allowance can be matched by regulated suppliers, this repricing risk is borne by consumers as firms are compensated for changing interest rates through the revenue allowance. This risk ties in with our wider discussion about price shocks and is discussed in that context above.
The Australian experience indicates that it is feasible to adopt a TACD. Furthermore, the AER considers that a TACD promotes overall efficiency of investment, and their consideration of a weighted trailing average reinforces their confidence in it. ⁹⁸	We agree that there are merits to both approaches. The AER’s confidence in the trailing average approach does not preclude the hybrid approach being a viable approach in our circumstances and in the context of our regulatory regime. We disagree that their experience indicates we must adopt a TACD. They have noted the limitations of their approach when conditions deviate from stable interest rates and expenditure profiles. ⁹⁹ Although they are currently consulting on using a weighted trailing average to address this, the weighting mechanism they are consulting on is yet to be tested in practice.

⁹³ For example, [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 3.

⁹⁴ Ibid, at 3.

⁹⁵ For example, [Clarus "Fibre input methodologies review 2027: Clarus views in response to issues paper \(Tranche 1\)" \(7 August 2025\)](#), at 2.

⁹⁶ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at [5b]. This report has been published alongside this draft decision and can be found [here](#).

⁹⁷ For example, [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 2.

⁹⁸ For example, [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 3.

⁹⁹ [Australian Energy Regulator "Rate of Return Instrument – Review discussion paper" \(August 2025\)](#), at 23.

Argument**Response / reasoning**

The AER considers that both approaches can be approximately equal over the life of the asset, and decisions should be made considering the long-term rather than a single IM review or regulatory period.¹⁰⁰

We agree that decisions should be made considering the long-term. Depending on the tenor of the TACD set, however, this may result in higher prices over the long-term. This is acknowledged in Orion's submission, where they state we should consider consumers' preferences and how they value lower prices vs stability, with which we agree.¹⁰¹

We are relying too heavily on the advice of one expert who is opposed to the TACD, namely Martin Lally.

We have addressed this by commissioning expert reports from Frontier Economics and Sapere. We have also considered (as set out above) the Australian regulatory experience and the submissions received so far.

He has also mischaracterised Schmalensee's work, calling his credibility into question.¹⁰²

The TACD requires less reliance on interest rate swaps.¹⁰³

We agree with this point.

¹⁰⁰ [Orion "Submission – Fibre IM Review Issues Paper – Cost of Capital Issues \(Tranche 1\)" \(7 August 2025\)](#), at [3.14].

¹⁰¹ *Ibid*, at [3.13].

¹⁰² [Electricity Networks Aotearoa "Submission to the Commerce Commission on the Fibre IM Review issues paper – tranche 1" \(7 August 2025\)](#), at 2 and 4.

¹⁰³ For example, [NZ Airports Association "Submission on Fibre Input Methodologies Review issues paper" \(7 August 2025\)](#), at 2.

Maintaining the estimation window of three months

- 4.138 Our draft decision is to retain the estimation window of three months leading up to a cost of capital determination. Our view is that regulated suppliers can hedge their risk-free rate exposure to the regulatory allowance, and this is an appropriate window of time to mitigate any impact on market pricing as a result of suppliers following our assumed debt management strategy. This reflects the current IM settings.¹⁰⁴

Approach to reaching our draft decision

- 4.139 Our draft decision on the estimation window for the prevailing approach was informed by submissions on our Issues paper and follow up engagement with Chorus and Transpower.

Submissions from stakeholders

- 4.140 Incenta (on behalf of Chorus) and Transpower expressed concerns that the debt management strategy assumed under our current approach cannot be replicated, or that doing so risked market disruption and elevated spreads, due to the size of their debt books relative to the depth of the NZ swap market.¹⁰⁵
- 4.141 We sought to better understand the concerns raised by requesting further information from Chorus and Transpower, as to whether they could demonstrate that they were unable to hedge to the regulatory allowance.
- 4.142 Previous confidential debt surveys, one completed as recently as 2023, have indicated that regulated suppliers are able to materially hedge their risk-free rate exposure without significant hurdles.
- 4.143 Since the last survey was completed, we have set a new price path for Chorus (PQP2) and Transpower (RCP4). The hedging activity associated with these resets provides an additional opportunity to examine this issue in practice.
- 4.144 Chorus responded that while it understood it could hedge its risk-free rate component via swaps, it would not be efficient to do so as there would be significant costs associated with fully eliminating interest rate risk. Given the relatively small New Zealand dollars (**NZD**) swap market, it understood its hedging demand at times could be large enough to affect market pricing and push against liquidity limits.

¹⁰⁴ For example, see [Fibre Input Methodologies Determination 2020, as consolidated on 5 September 2025](#), clause 2.4.3(1)(d).

¹⁰⁵ [Incenta Economic Consulting "Issues relating to common WACC elements" - 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#), at 6, and [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 2.

4.145 Transpower responded that whilst it was difficult to estimate what market disruption or associated costs might occur without the counterfactual comparison, it considered it would potentially be “0.02% to 0.20%, or more”, due to the pressure placed on rates during periods of low liquidity. Transpower further noted that coincidentally, rates have declined through the last three RCP determination windows with sufficient liquidity to accommodate their hedging but pointed out there were other periods of rising rates during periods of low liquidity.

Reasons for our draft decision

4.146 Transpower and Chorus submitted that they may not be able to carry out our assumed debt management strategy, however their responses to requests for further information did not demonstrate that they were unable to do so, or doing so caused market disruption during previous hedging windows.¹⁰⁶

4.147 On this basis, we continue to consider that the three-month estimation window remains appropriate, that our assumed debt management strategy is replicable, and that suppliers can achieve an effective match between their actual debt costs and the regulatory allowance.

4.148 This matching promotes incentives to invest, and thus the statutory purposes.

Aligning the term of the risk-free rate with the length of the regulatory period

4.149 Our draft decision is to set the term of the risk-free rate for the cost of debt equal to the length of the regulatory period. This reflects the current IM settings.¹⁰⁷

Approach to reaching our draft decision

4.150 Our draft decision here was informed by the expert report we commissioned from Sapere Research Group on the term of the risk-free rate. Whilst the report addresses this question in the context of the cost of equity, we consider many of the arguments apply in the context of the cost of debt.

¹⁰⁶ Transpower- Response to our query on hedging practices - 1 September 2025 and Chorus - Response to our query on hedging practices - 1 December 2025 both published on 10 March 2026

¹⁰⁷ For example, see [Fibre Input Methodologies Determination 2020, as consolidated on 5 September 2025](#), clause 2.4.3(1)(d).

- 4.151 The report concluded that we should continue to match the term of the risk-free rate for the cost of equity to the length of the regulatory period. For example, the report states:

In determining the true NPV of a regulated asset, what really matters is what return the market requires on cash-flows occurring over the regulatory period, after taking into account the regulatory process that sets those cash-flows. Allowing a ten-year rate for a five-year regulatory period would, to obtain NPV=0, only work if investors consistently require a return on cash-flows (ie, the ten-year rate) that is mis-matched with the term (ie, 5 years) over which the cash-flows are received, a mis-pricing proposition that appears most unlikely. It seems far more likely that the market recognises the recursive structure resulting from the regulatory process and prices accordingly.¹⁰⁸

Reasons for our draft decision

- 4.152 Achieving NPV=0 requires that the present value of cash-flows, including the return on and of capital, is equal to the initial investment. This reflects a regulated supplier earning a normal return on their investment and is therefore fundamental to promoting our statutory purpose by which suppliers have incentives to invest in their network yet are limited in their ability to extract excessive profits.
- 4.153 We consider this argument is even stronger when considering the cost of debt, where regulated suppliers can use interest rate swaps to align the term of the risk-free portion of their cost of debt to the length of the regulatory period. Doing so allows regulated suppliers to align their cost of debt with the regulatory allowance, and setting a different term would tend to over- or under-compensate them.
- 4.154 In this context, if suppliers were compensated for the risk-free rate on longer-term debt through the regulatory allowance, whilst being exposed to the risk-free rate on shorter-term debt, they will be over-compensated and earn excessive profits due to rates on longer-term debt generally exceeding rates on shorter-term debt.
- 4.155 On this basis, we consider that the draft decision to aligning the term of the risk-free rate for the cost of debt with the length of the regulatory period best promotes the statutory purposes.

¹⁰⁸ Sapere Research Group "The New Zealand Commerce Commission's Approach to Setting the Term of the Risk-Free Rate: Review and Evaluation" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', 8 September 2025), at [18]. This report has been published alongside this draft decision and can be found [here](#).

Chapter 5 Other cost of debt issues

- 5.1 In light of our draft decision of maintaining the current hybrid approach to the cost of debt, it implies that we will continue to estimate the cost of debt by separate components. In this chapter we discuss other cost of debt issues. These include:
- 5.1.1 the simple and complex approach for the cost of debt;
 - 5.1.2 our approach to the debt premium;
 - 5.1.3 the TCSD; and
 - 5.1.4 the debt issuance and associated costs.
- 5.2 For each topic, our draft decision, current IM settings, and our reasons for our draft decision are discussed.

The simple and complex approach to estimating the cost of debt

- 5.3 Firms have a range of options to raising debt. Put simply, these options include bank loans, issuing bonds in New Zealand to institutions or the public and issuing bonds overseas.
- 5.4 There are two common approaches to estimating the cost of debt:
- 5.4.1 one is called “simple approach”, it only considers credit-rated publicly traded corporate bonds denominated in New Zealand dollars; and
 - 5.4.2 the other one is called “complex approach”, which considers that firms may raise debt capital through a number of channels in addition to issuing bonds in New Zealand.

Draft decision

- 5.5 Our draft decision is to maintain our current approach of using the simple approach to estimating the cost of debt.

Current IM settings

- 5.6 We currently use a simple approach to estimating the cost of debt. That is, we only consider credit-rated publicly traded corporate bonds denominated in New Zealand dollars when estimating the debt premium and debt issuance and associated costs.

Reasons for our draft decision

- 5.7 We consider that using a simple approach better promotes certainty for regulated businesses and consumers in relation to the rules, requirements, and processes applying to the regulation as required under s 52R of the Commerce Act and s 174 of the Act. This is because the simple approach is relatively easy to understand, and it is transparent and objective as it only uses publicly available data. Compared to the complex approach, it also requires fewer subjective assumptions regarding, for example, treasury risk management policies or market issuance capacity.¹⁰⁹
- 5.8 We received no submissions suggesting a change to this approach. However, Chorus submitted that the debt issuance costs associated with the simple approach under-compensated them for the more complex securities they issue.¹¹⁰ We have responded to Chorus' submission on their debt issuance costs in Chapter 5 from paragraphs 5.65-5.70.

Our approach to the debt premium

- 5.9 The debt premium reflects the premium over and above the risk-free rate that borrowers must pay to compensate for default risk.
- 5.10 Importantly, the debt premium always increases with the term to maturity. That is, longer-term debt premiums will always be greater than shorter-term debt premiums.

Our draft decision

- 5.11 Our draft decision is to maintain the current approach to estimating the debt premium. As set out in the IMs,¹¹¹ this includes:
- 5.11.1 estimating the debt premium using a trailing average approach;
 - 5.11.2 setting the term of the debt premium to five years (with a TCSD for qualifying suppliers);
 - 5.11.3 not annually updating the estimate of the debt premium; and
 - 5.11.4 estimating the debt premium as a separate component of the cost of debt.

¹⁰⁹ For more detailed explanation on simple approach versus complex approach, see [Commerce Commission "Fibre input methodologies: Main final decisions – reasons paper" \(13 October 2020\)](#), at [6.186]-[6.191].

¹¹⁰ [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at [81]-[82].

¹¹¹ [Fibre Input Methodologies Determination 2020, as consolidated on 5 September 2025](#), clause 2.4.4 and 3.5.4.

Reasons for our draft decision

- 5.12 We consider our draft decision to the debt premium better promotes the statutory purposes by providing appropriate incentives to invest in their networks whilst limiting their ability to extract excessive profits.¹¹²
- 5.13 We have analysed four main issues on the approach to the debt premium:
- 5.13.1 estimating the debt premium using a trailing average approach;
 - 5.13.2 the appropriate term of the debt premium;
 - 5.13.3 whether to introduce annual updating to the debt premium; and
 - 5.13.4 estimating the debt premium as a separate component of the cost of debt.
- 5.14 We received one submission from Transpower on this topic on our Issues paper. Transpower submitted that:¹¹³
- 5.14.1 they could not match the debt premium;
 - 5.14.2 we should apply the TACD approach to the entire cost of debt, and estimate the cost of debt as a whole (rather than individual risk-free rate and debt premium components);
 - 5.14.3 the debt premium should be set using a ten-year trailing average and given we already do so with a five-year trailing average, extending this to 10 years would involve minimal extra effort.

Estimating the debt premium using a trailing average approach

- 5.15 We consider that it is prudent and efficient to issue debt on a staggered basis to mitigate refinancing risk.
- 5.16 Whilst the existence of interest rate swaps allows for regulated suppliers to hedge the risk-free portion of their debt to the prevailing rate at the beginning of a regulatory period, whereas they cannot feasibly do so for the debt premium component.
- 5.17 Therefore, the debt premium component of regulated suppliers' actual debt costs is likely to be commensurate with a trailing average approach.

¹¹² As required under s 162 (a) and (d) of the [Telecommunications Act 2001](#) and s 52A(a) and (d) of the [Commerce Act 1986](#).

¹¹³ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 2-3.

- 5.18 Setting the regulatory allowance in line with a trailing average approach likely promotes an effective matching between the regulatory allowance and suppliers' actual debt costs, promoting the appropriate incentives to invest in their networks whilst limiting their ability to extract excessive profits thereby promoting the statutory purposes.
- 5.19 Our draft decision is therefore to estimate the debt premium using a trailing average approach. Setting the term of the debt premium to five years (with a TCSD for qualifying suppliers). Having decided not to adopt a ten-year trailing average for the risk-free rate, we disagree with Transpower that the term of the debt premium should be set to ten years.
- 5.20 As mentioned above, we consider that providing regulated suppliers with a reasonable opportunity to match the regulatory allowance, which we view as an efficient cost of capital for our notional benchmark efficient firm, best promotes incentives to invest and limits their ability to extract excessive profits.
- 5.21 In our most recent confidential debt survey, we noted that many regulated suppliers issue debt with an original tenor of less than ten years. As the debt premium increases with the term to maturity, increasing the debt premium that is used to set the regulatory allowance would over-compensate these suppliers, and provide the incorrect incentives to invest or lead to them earning excessive profits.
- 5.22 We do recognise that some of the larger regulated suppliers issue debt with maturities that exceed five years to mitigate their refinancing risk, and we consider it may be prudent and efficient to do so. We separately provide a term credit spread differential (TCSD) allowance to compensate qualifying suppliers for the additional debt premium they face on this debt with an original tenor which exceeds five years (up to a ten-year maturity).
- 5.23 We consider this draft decision promotes the statutory purposes as it strikes the right balance between adequately compensating suppliers who issue longer-term debt, without over-compensating many of the regulated suppliers who issue shorter-term debt.
- 5.24 As such, our draft decision is to maintain the five-year term for the debt premium.

Not annually updating the estimate of the debt premium

- 5.25 In the past, we have acknowledged that as the debt premium changes over the course of the regulatory period, there will be a mismatch between that reflected in the regulatory allowance, and the actual debt premium faced when refinancing debt.
- 5.26 However, the debt premium tends to be relatively stable over time and typically makes up a smaller portion of the cost of debt allowance than other parameters such as the risk-free rate. The debt premium is also averaged over the last five years, so any change in the debt premium in any given year will have a relatively small impact on the allowed average debt premium.

- 5.27 Furthermore, as the debt premium is reset in subsequent regulatory periods, these new debt premium values will be reflected in subsequent regulatory allowances, which will mitigate the impact of mismatches in the long run.
- 5.28 Over time, we therefore expect any mismatches to be immaterial. We have previously examined this issue empirically and found the benefits of annually updating the debt premium to be minor.¹¹⁴
- 5.29 If we were to implement an annual update to the debt premium estimate, this would introduce an additional degree of administrative / regulatory burden, that we should not incur without seeing material benefits.¹¹⁵ The issues involved to provide an annual update to the allowance is similar to those discussed in paragraphs 4.105 to 4.109.
- 5.30 On this basis, our draft decision is to not annually update the debt premium.

Estimating the debt premium as a separate component of the cost of debt

- 5.31 We currently estimate the risk-free rate using a prevailing approach, and the debt premium using a trailing average approach. These differing approaches necessitate estimating the risk-free rate and debt premium as separate components of the cost of debt.
- 5.32 If we were to adopt a trailing average approach to the risk-free rate, we consider there would be merit in estimating the cost of debt as a whole (i.e., the risk-free rate and debt premium as one value). However, as our draft decision on the risk-free rate is to maintain a prevailing approach, we do not consider that we can/ should estimate the components together.
- 5.33 As such, we consider that it is appropriate to continue estimating the risk-free rate and debt premium as separate components of the cost of debt.

Term Credit Spread Differential

- 5.34 The cost of capital IM includes a TCSD allowance to compensate regulated suppliers/providers for the additional debt premium incurred from issuing debt with an average original term greater than five years (the term that we allow for in the debt premium).
- 5.35 The TCSD allowance is only applied if a bond is issued with an original term to maturity in excess of five-years and the weighted average original term to maturity of its debt portfolio is also greater than five years.

¹¹⁴ [Commerce Commission “Cost of capital topic paper – Part 4 Input Methodologies Review 2023 – Final decision” \(13 December 2023\)](#), at [3.160]-[3.165].

¹¹⁵ As noted in our decision-making framework, see paragraphs 1.13.3.

- 5.36 The TCSD is calculated by way of a formula that combines:
- 5.36.1 the additional debt premium associated with debt that has an original term to maturity in excess of the five-year debt premium (the ‘spread premium’) up to a cap of ten years,¹¹⁶ and
 - 5.36.2 a negative adjustment to take account of the lower per-annum debt issuance costs that are associated with longer-term debt.¹¹⁷ This is tied to the value of the debt issuance and associated costs which will be discussed later in this section.
- 5.37 In our Issues paper, we raised that we would reconsider our approach to estimating the TCSD in tranche 1, including:
- 5.37.1 if we maintain the current approach to estimating the cost of debt, we will review the approach and methodology for estimating the TCSD in Tranche 1;¹¹⁸ and
 - 5.37.2 if we decide to change our current approach to the cost of debt, whether we should retain the TCSD allowance.

Our draft decision

- 5.38 Our draft decision is to:
- 5.38.1 maintain the current methodology for estimating the TCSD, that is to maintain the current formula of combining the spread premium and the negative adjustment to debt issuance costs;
 - 5.38.2 maintain the ten-year cap on the TCSD allowance; and
 - 5.38.3 maintain the current approach of not specifying a TCSD allowance for airports services and leave the decision for Airport’s price setting event.
- 5.39 We will estimate the value of the spread premium (and the TCSD) for Fibre in Tranche 2.

Current IM settings

- 5.40 The TCSD is only available to regulated providers who have met the criteria and issued long-term debt.
- 5.41 We calculate the TCSD allowance in two parts: the spread premium and the debt issuance costs adjustments.

¹¹⁶ This debt is called ‘qualifying’ debt.

¹¹⁷ We assume that all debt issuance costs are fixed, irrespective of the original term of the debt.

¹¹⁸ We note that the spread premium depends on the credit rating, which will be reviewed in Tranche 2.

- 5.42 We specify the value of spread premium in the WACC IM determinations. Currently, we use:
- 5.42.1 a spread premium of 7.5 bps for Fibre; and
 - 5.42.2 a spread premium of 8.5 bps for Part 4 energy businesses.¹¹⁹
- 5.43 We do not specify a TCSD allowance for airports services as we consider that the compensation for long-term debt for airports could be assessed during the price setting event.
- 5.44 We currently set a ten-year cap on the TCSD allowance.

Reasons for our draft decision

- 5.45 Our draft decision is to maintain our current approach to estimating the TCSD including maintaining a ten-year cap on the TCSD allowance. We consider it best promotes the statutory purpose by providing incentives to invest through recognising the additional debt premium associated with issuing longer-term debt and by limiting the ability to earn excessive profits through capping the allowance at 10 years.¹²⁰
- 5.46 We received one submission from Transpower on this topic. Transpower recommended moving to a ten-year trailing average approach to the cost of debt, and concluded that if we did that, we would not need to provide a TCSD allowance.¹²¹
- 5.47 We discussed in paragraphs 4.7 and 5.11 that our draft decision is to maintain:
- 5.47.1 the current hybrid approach to the cost of debt; and
 - 5.47.2 maintain a term of five years for the debt premium.
- 5.48 Based on the draft decision we made with respect to the approach to the cost of debt and term of debt premium, we consider that it is necessary to retain a TCSD allowance for qualified regulated suppliers/providers. As we explained in 2023 Part 4 IM Review reasons paper, we consider that issuing longer term debt can be consistent with prudent debt management.¹²²
- 5.49 We consider that our draft decision to estimating the TCSD with a formula that combines a spread premium and a negative adjustment to the debt issuance costs remains appropriate.

¹¹⁹ This includes Transpower, EDBs, and GPBs.

¹²⁰ As required under s 162 (a) and (d) of the [Telecommunications Act 2001](#) and s 52A(a) and (d) of the [Commerce Act 1986](#).

¹²¹ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 4.

¹²² [Commerce Commission "Cost of capital topic paper – Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), at [3.211].

- 5.50 We also note that the spread premium will depend on the benchmark credit rating, which will be reviewed for Fibre in Tranche 2. We will base on the reviewed credit rating and use the latest available data to estimate the value of spread premium (and the TCSD allowance) in Tranche 2 for Fibre.
- 5.51 Our draft decision is to cap the TCSD allowance at 10 years. This is because when we estimate the spread premium, we estimate a straight-line relationship between the term and the premium for simplicity given the additional complexity of curve fitting, data requirements and materiality, but we understand that it is more akin to a curve. In 2020 Fibre IM reasons paper, we considered that beyond 10 years the incremental premium becomes immaterial against the reduced debt issuance costs adjustment.¹²³
- 5.52 Therefore, we consider that it is appropriate to set the maximum allowed tenor at 10 years. Providing for a higher debt premium above 10 years based on a fixed linear relationship (when in practice we would expect the yield curve to flatten as the term to maturity increases) could over-compensate regulated suppliers/providers that issue longer term debt. This would undermine the statutory purposes (specifically s 52A(1)(d) of the Commerce Act and s 162(d) of the Telecommunications Act) as it would result in an outcome that did not limit the ability to earn excessive profits and would therefore not be in the long-term benefits for consumers/end-users.
- 5.53 Our draft decision is to maintain our current approach of not specifying a TCSD value for airports services. Airports are subject to ID regulation, and the impact of long-term debt can be considered at the price setting event (**PSE**) depending on the Airport's specific circumstances. For example, in 2022 PSE review, we assessed whether the additional compensation would be appropriate for the additional debt premium that can be incurred from issuing debt with a longer original term than the five-year regulatory period for Wellington Airport.

Debt issuance and associated costs

- 5.54 Issuing and maintaining a portfolio of debt incurs costs, such as issuing debt, brokerage, cost of carry facilities.
- 5.55 Engaging in our assumed debt management strategy requires the use of interest rate swap contracts, which also incur costs.
- 5.56 Our view is that these are legitimate costs to incur and should be compensated for in the regulatory allowance.

¹²³ [Commerce Commission "Fibre input methodologies: Main final decisions – reasons paper" \(13 October 2020\)](#), at [6.326].

Our draft decision

- 5.57 Our draft decision on the debt issuance and associated costs is to:
- 5.57.1 maintain a total allowance for debt issuance and associated cost of 20 bps p.a. for a five-year regulatory period;
 - 5.57.2 allow debt issuance and associated cost at 25 bps p.a. for a four-year regulatory period; and
 - 5.57.3 allow debt issuance and associated cost at 33 bps p.a. for a three-year regulatory period.
- 5.58 This baseline 20 bps for a five-year regulatory period broadly represents:¹²⁴
- 5.58.1 8-10 bps p.a. for direct debt issuance costs;
 - 5.58.2 4 bps p.a. for interest rate swap contracts; and
 - 5.58.3 7-9 bps p.a. for compensation for additional costs, where efficiently incurred, associated with costs such as brokerage, new issue premium, committed facilities/cost of carry or forward starting swaps.

Current IM settings

- 5.59 The current IMs allow a total allowance for debt issuance and associated cost of 20 bps p.a. for a five-year regulatory period.
- 5.60 The current IMs also allow an upward adjustment to the debt issuance and associated costs on a *pro rata* basis for a shorter regulatory period to recognise the higher costs incurred as a proportion of total annual debt costs. For example,
- 5.60.1 the allowance for a four-year regulatory period is 25 bps p.a. (estimated as 25 bps = $20 \times (5/4)$).
 - 5.60.2 the allowance for a three-year regulatory period is 33 bps p.a. (estimated as 33 bps = $20 \times (5/3)$).

¹²⁴ As discussed in [Commerce Commission “Input Methodologies review decisions – Topic paper 4: Cost of capital issues” \(20 December 2016\)](#); and [Commerce Commission “Fibre input methodologies: Main final decisions – reasons paper” \(13 October 2020\)](#), we explained that the 20 bps p.a. estimate is our best view of the ‘average cost’ of a benchmark supplier that issues NZ domestic vanilla bonds on a regular basis consistent with our ‘simple approach’ to estimating the cost of debt. Given the variability in costs, we have deliberately not been precise in estimating debt issuance, and the 20 bps broadly represents the following three parts as outlined below.

Reasons for our draft decision

- 5.61 Our view is that the current allowance remains appropriate, for several reasons.
- 5.62 The current allowance is based on information provided by regulated suppliers throughout previous confidential debt surveys. The most recent debt survey was conducted throughout the 2023 IM Review and invited both Part 4 and Part 6 regulated businesses to provide data. At the time of that survey, we were comfortable with the current allowance.
- 5.63 We received two submissions from Transpower and Chorus on debt issuance and associated costs on our Issues paper.
- 5.64 Transpower submitted that they support an allowance for debt issuance costs based on evidence received from regulated parties.¹²⁵
- 5.65 Chorus submitted that they raise capital using more complex securities than those assumed under our “simple” approach to estimating the debt premium and consider that our current allowance understates the true cost of debt issuance for Chorus. Chorus pointed to an example of a recent capital note that they raised which has an equity-like component but did not provide information on the associated issuance costs.¹²⁶
- 5.66 Our approach is to estimate the cost of debt for a notional benchmark provider of FFLAS services, rather than compensate each supplier for their actual costs incurred. This ensures that the regulatory allowance reflects our view of a “normal” return on their investment and promotes the appropriate incentives to invest whilst limiting their ability to extract excessive profits thereby promoting the long-term benefit of end-users/consumers.
- 5.67 We adopt a “simple” approach to the cost of debt, where our estimate is based on publicly traded NZD denominated vanilla bonds. Allowing additional issuance costs for more complex securities would be inconsistent with this approach and could result in an estimate which did not reflect our view of a normal return and could undermine the statutory purposes because it did not promote the appropriate incentives to invest or resulted in suppliers earning excessive profits.
- 5.68 Furthermore, under incentive-based regulation, individual suppliers are free to make their own commercial decisions (such as raising capital in the way they see fit) which deviate from our assumed approach if they are willing to bear any upside or downside risk of doing so. This does not indicate that our allowance is insufficient.

¹²⁵ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 4.

¹²⁶ [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at [81]-[82].

- 5.69 It may be the case that these more complex securities are being issued as they result in a cost of capital that is lower than our allowance, based on the market conditions at the time of being issued. Achieving a lower cost of capital would need to be weighed up against any increase in the allowed issuance costs, and not doing so could result in Chorus earning excessive profits.
- 5.70 On balance, we continue to consider that our allowance for debt issuance costs is sufficient and best promotes the statutory purposes.

Chapter 6 Cost of equity

- 6.1 This chapter explains our draft decision on the common WACC approach for both Part 6 and Part 4 under the cost of equity on:
- 6.1.1 the approach to the risk-free rate for the cost of equity;
 - 6.1.2 the approach of tax-adjusted market risk premium (TAMRP); and
 - 6.1.3 whether to include an allowance for equity issuance costs.

Risk-free rate for the cost of equity

- 6.2 The risk-free rate is the interest rate that an investor would expect to earn by holding a risk-free asset. The Commission uses the risk-free rate when estimating both the cost of debt and the cost of equity. Under the SBL-CAPM, the expected cost of equity is a function of the risk-free rate (after-tax) plus the equity beta multiplied by the TAMRP.¹²⁷
- 6.3 As set out in the Issues paper, we considered whether to maintain the current approach to the cost of equity, which is to use the same risk-free rate for both the cost of equity and cost of debt.

Our draft decision

- 6.4 Our draft decision on the risk-free rate for the cost of equity is to maintain a:
- 6.4.1 prevailing risk-free rate for the cost of equity, calculated by averaging the observed market yields on NZ Government bonds over a three-calendar month determination window; and
 - 6.4.2 risk-free rate term for the cost of equity that matches the length of regulatory period.
- 6.5 As our draft decision to the risk-free rate for both cost of debt and cost of equity is to maintain the current approach, this means that we will use the same risk-free rate for cost of equity and cost of debt.¹²⁸
- 6.6 As part of this review, we commissioned two expert reports one from Frontier Economics and one from Sapere Research Group, on the appropriate term of the risk-free rate for the cost of equity. We have published these two reports alongside this draft decision reasons paper.¹²⁹

¹²⁷ See explanation on SBL-CAPM in paragraphs 3.22-3.24.

¹²⁸ See paragraph 4.7 for our draft decision to the risk-free rate for cost of debt.

¹²⁹ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025); and Sapere Research Group "The New Zealand Commerce Commission's Approach to Setting the Term of the Risk-Free Rate: Review and Evaluation" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', 8 September 2025). These reports have been published alongside this draft decision.

Current IM settings

- 6.7 The cost of capital IM (in both the Fibre and Part 4 IMs) specifies the methodology for estimating the risk-free rate:¹³⁰

The Commission will estimate a risk-free rate by obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds, the wholesale market linearly interpolated bid yield to maturity for a residual period to maturity equal to the regulatory period term on each business day in the 3-month period of 8 to 10 months prior to the start of the regulatory period.¹³¹

- 6.8 We currently apply the same ‘prevailing’ approach to estimating the risk-free rate for the cost of equity and the cost of debt under those IMs.
- 6.9 We use a term for the risk-free rate which matches the length of the regulatory period.

Reasons for our draft decision

- 6.10 Based on the submissions and expert reports we received, we have analysed two main issues on the approach to the risk-free rate for the cost of equity:

6.10.1 historical vs prevailing risk-free rate for equity; and

6.10.2 the appropriate term for risk-free rate.

- 6.11 We discuss each of these issues in the following sections.

Historical vs prevailing risk-free rate for equity

- 6.12 The Issues paper indicated we are considering whether to maintain the current approach which is to use the same risk-free rate for cost of equity and cost of debt, or whether we should move to a different approach to estimating the risk-free rate for cost of equity, subject to the approach to the risk-free rate for cost of debt.^{132,133} We consider the alternative could be using a historical approach, ie, a trailing average approach, to estimating the risk-free rate for cost of equity.

¹³⁰ For PQ purpose.

¹³¹ [Fibre Input Methodologies Determination 2020, as consolidated on 5 September 2025](#), clause 3.5.3. Similar clauses in [Electricity Distribution Services Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 4.4.3; [Transpower Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 3.5.3; [Gas Transmission Services Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 4.4.3; and [Gas Distribution Services Input Methodologies Determination 2012, as amended on 13 December 2023](#), clause 4.4.3.

¹³² As explained in our current IM setting, we use the same risk-free rate for both cost of equity and cost of debt, that is we use a prevailing approach to estimate the risk-free rate and match the term of it to the length of regulatory period. We also use NZ Government bonds as the proxy for the risk-free rate.

¹³³ We note that many submitters advocated for a five- or ten-year trailing average approach to the risk-free rate (and the cost of debt).

- 6.13 Our draft decision is to maintain the use of a prevailing approach for the risk-free rate for the cost of equity. We consider this approach better reflects the current expectations of returns required in the future, which better promotes incentives to invest (s 162 (a) of the Telecommunications Act and s 52A(1)(a) of the Commerce Act). We also consider that our draft decision better reflects the current market conditions, which better promotes workable competition in telecommunications markets for the long-term benefits of end-users of telecommunication services (s166(2)(b) of the Telecommunications Act).

Submissions we received and our consideration

- 6.14 We received five submissions on the Issues paper in relation to this topic, including an expert report from Incenta on behalf of Chorus.¹³⁴
- 6.15 Several submitters support our current prevailing approach:
- 6.15.1 NZAA submitted that the fundamental nature of equity being forward-looking, market based, and unhedgeable, demands an internally consistent forward-looking methodology.¹³⁵ It commented that our 2016 rationale for retaining the on-the-day approach for debt, aimed at preserving accurate market signals and investors' expectations, applies even more strongly in the context of equity.¹³⁶
- 6.15.2 Transpower did not think the approach to the risk-free rate for equity must align with the cost of debt. Instead, Transpower submitted it should be consistent with the approach to the TAMRP to reflect investors' current expectations.¹³⁷ It also commented that if we retain a prevailing risk-free rate for equity, then the current approach to the TAMRP remains conceptually coherent.¹³⁸ This approach aligns with market expectations and maintains the CAPM's forward-looking perspective, ensuring the cost of equity reflects the current opportunity cost of new investments.¹³⁹

¹³⁴ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\).](#)

¹³⁵ [NZ Airports Association "Submission on Fibre Input Methodologies Review issues paper" \(7 August 2025\), at \[18\].](#)

¹³⁶ [NZ Airports Association "Submission on Fibre Input Methodologies Review issues paper" \(7 August 2025\), at \[17\].](#)

¹³⁷ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\), at 4.](#)

¹³⁸ *Ibid*, at 4.

¹³⁹ *Ibid*, at 4.

- 6.16 However, Incenta, on behalf of Chorus, submitted that the approach to the risk-free rate for equity should be considered from the perspective of improving stability in the cost of equity. It provided two options to achieve this:¹⁴⁰
- 6.16.1 one is to apply a spot risk-free rate for equity along with a full Siegel 2 approach to the TAMRP;¹⁴¹ and
- 6.16.2 the other is to use a five-year trailing average approach to the risk-free rate for equity along with our current approach to the TAMRP (taking the median estimate of five different estimation methods).¹⁴²
- 6.17 Chorus' main submission supported Incenta's proposals.¹⁴³
- 6.18 We note that NZAA (in its cross-submission) disagreed with Incenta's proposed cost of equity stabilisation mechanisms as it considered they would blunt investment signals and distort risk allocation.¹⁴⁴
- 6.19 The cost of equity is the expected rate of return required by investors on equity capital that compensates them for the risk they bear. We consider that the cost of equity is forward-looking; that is, it should reflect the expectations of returns required in the future. We therefore agree with Transpower and NZAA's views that using a forward-looking approach better reflects market expectations for the cost of equity. We also consider that using the prevailing approach means changes in expectations in the financial markets will be signalled more rapidly to regulated suppliers and consumers.
- 6.20 We therefore consider that maintaining our current approach best promotes the statutory purposes by providing incentives to invest.¹⁴⁵ We also note that using the prevailing approach to estimating the risk-free rate for equity is consistent with most Australian regulators.¹⁴⁶

¹⁴⁰ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#).

¹⁴¹ Incenta proposed this approach due to Siegel 2 approach is equivalent to Total Market Return (TMR) approach which assumes TMR is the sum of risk-free rate and MRP and that TMR is constant over time. This can produce greater stability for cost of equity due to the stability of the historical TMR estimates compared to the stability of the MRP estimates.

¹⁴² Incenta and Chorus consider this approach would also smooth the cost of equity through smoothing the risk-free rate component for the cost of equity.

¹⁴³ [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 20.

¹⁴⁴ [NZ Airports Association "Cross-submission on Fibre Input Methodologies Review issues paper" \(27 August 2025\)](#), at 2.

¹⁴⁵ As required under s 162(a) of the [Telecommunications Act 2001](#) and s 52A(1)(a) under Part 4 of the [Commerce Act 1986](#).

¹⁴⁶ According to CEPA draft report on WACC methodology prepared for ACCC, aside from IPART, all Australian regulators adopt an averaging period of between 20 and 60 days. This reflects their view that estimating the risk-free rate close to the start of regulatory period provides the best forward-looking estimate for that period. See [Cambridge Economic Policy Associates "WACC Methodology – ACCC Draft Report" \(report prepared for ACCC, 1 August 2025\)](#), at 14-15.

- 6.21 We consider that our draft decision best gives or is likely to best give effect to the promotion of workable competition in telecommunications markets for the long-term benefits of end-users as required by s 166(2)(b) of the Telecommunications Act. This is because we consider that the prevailing approach more likely reflects the financing conditions that prospective new entrants in telecommunications markets would face. Although new entrants are infrequent, using the prevailing approach reduces barriers to entry, as the new entrant would likely have to finance themselves at the prevailing cost of equity. So, although when interest rates are relatively stable both a prevailing and a trailing average approach may promote competition, we consider that on balance, the prevailing approach best promotes workable competition in telecommunications markets as it better reflects the actual market that firms will be operating in.
- 6.22 We consider Chorus' suggestion of using a five-year trailing average approach for the risk-free rate for equity is not appropriate in the context of the cost of equity. Using a trailing average approach to the cost of equity would undermine incentives to invest (as per the statutory purposes) because it blunts the signals from changes in expectations in the financial markets.
- 6.23 Although adopting a trailing average approach to the cost of equity may moderate price variations at a reset, we note that substantial price variations can still occur as a result of capital and operating expenditure increases. We also note that although the variations in the risk-free rate from period to period may result in some variability in revenue requirements, we have other preferred tools to smooth this effect at the aggregate level, where desirable, for example, price smoothing within the regulatory period to avoid significant rate shocks, as well as adjustments to depreciation. One reason for this aggregate approach is that individual revenue components may move in opposite directions and offset each other to some degree, as happened in DPP2 and DPP3, when a lower risk-free rate offset increases in expenditure, reducing the potential need to smooth revenues to begin with.
- 6.24 On the consistency between the approach to risk-free rate for equity and TAMRP, we will address this in paragraphs 6.157 – 6.161 under the TAMRP section.

Appropriate term for the risk-free rate for equity

- 6.25 Our draft decision is to maintain the current approach to match the term of the risk-free rate for equity to the length of regulatory period. Having considered all the arguments, we think our current approach best meets the statutory purposes.
- 6.26 We did not receive any submissions on our Issues paper with respect to the term of the risk-free rate for equity, so our starting point is to maintain our current approach.

- 6.27 We sought two reports from Frontier Economics and Sapere to review and comment on our current approach of using a term for the risk-free rate for equity that matches the length of the regulatory period. Each report stated different views:
- 6.27.1 Frontier Economics recommended using a ten-year risk-free rate for equity; and
- 6.27.2 Sapere considered our current approach of matching the term of the risk-free rate for equity to the length of regulatory period is correct and there is no reason to change it.
- 6.28 We discuss the main arguments in these expert reports and the rationale for our draft decision in the next section. We first discuss the NPV=0 criterion and standard financial market practice. Although we note that these two issues are interrelated, we consider that it is important to explain the NPV=0 criterion in isolation as it reflects the requirements under statutory purposes on both incentives to invest and limiting excessive profits. We then discuss the issue of overseas regulators practice. We finally discuss how our draft decision on approach to the risk-free rate links to the statutory purposes.

NPV=0 criterion

- 6.29 Frontier Economics commented that to achieve the NPV=0 criterion, regulators should set the allowed return on equity to match the return that investors actually require.¹⁴⁷ It further commented that there is evidence that the standard financial market practice is to use a ten-year term for the risk-free rate.¹⁴⁸
- 6.30 In contrast, Sapere argued that, in determining the true NPV of a regulated asset, what really matters is the return the market requires on cash-flows occurring over the regulatory period, after taking into account the regulatory process that sets those cash-flows.¹⁴⁹
- 6.31 Sapere commented that although the SBL-CAPM model developed by Dr Lally contains simplifying assumptions, no work has successfully shown that relaxing these assumptions can justify a different term to the length of the regulatory period.¹⁵⁰ Sapere also pointed out that because of the ability to reset rates at the end of every regulatory period, the regulatory problem is recursive. This means that we effectively get to reset an asset's expected cash-flows every regulatory period.

¹⁴⁷ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at [252]. This report has been published alongside this draft decision and can be found [here](#).

¹⁴⁸ Ibid, at 41.

¹⁴⁹ Sapere Research Group "The New Zealand Commerce Commission's Approach to Setting the Term of the Risk-Free Rate: Review and Evaluation" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', 8 September 2025), at [18]. This report has been published alongside this draft decision and can be found [here](#).

¹⁵⁰ Ibid, at [14].

- 6.32 Sapere commented that, with only the current regulatory period to worry about, it immediately follows that NPV=0 can only be attained if the allowed risk-free rate is set exactly equal to the market yield offered by cash-flows occurring during the regulatory period, so the only allowed return that will ensure NPV=0 is that same five-year rate (for a five-year regulatory period).
- 6.33 Similar debates occurred during the AER's concurrent evidence sessions on the term of the rate of return in 2022.¹⁵¹ Experts discussed the same matter on the term of the rate of return including which term should be set for the risk-free rate for the cost of equity to best achieve the NPV=0 criterion.¹⁵² Dr Glenn Boyle expressed that the rate satisfying NPV=0 is the one that matches the term of the cash-flows and because the regulator is tasked with achieving NPV=0 over each regulatory period, then they will achieve NPV=0 over the entire life of the asset.¹⁵³ Conversely, Dinesh Kumareswaran argued that the cash-flows from the perspective of an equity investor are long-term cash-flows.¹⁵⁴
- 6.34 The AER therefore concluded that from a regulatory perspective, NPV=0 is satisfied by matching the term to the length of the regulatory period, while from a long-term investor perspective, NPV=0 is satisfied by matching their practice of using a longer term of the risk-free rate.¹⁵⁵
- 6.35 We agree with the AER that depending on which perspective we take, either the regulatory period or a ten-year term can achieve the NPV=0 criterion. However, as we operate in a regulatory context in which we reset prices at discrete intervals, we agree with Sapere that this perspective should determine our approach. On this basis, we consider that maintaining the current approach best meets the NPV=0 criterion.

Standard financial market practice

- 6.36 Frontier Economics argued that the evidence shows that the standard financial market practice is to use a longer term for the risk-free rate. Specifically, independent valuation experts uniformly adopt a ten-year term when determining the risk-free rate for infrastructure assets.¹⁵⁶

¹⁵¹ As part of AER's stakeholder engagement on the 2022 Rate of Return Instrument, the AER held four evidence sessions to hear expert opinions about the proposed instrument. The issue of the appropriate term of cost of equity was discussed in the second session, see: [Australian Energy Regulator "Rate of Return instruments Concurrent Evidence Session 2 of 4: Term of the rate of return, and weighted trailing average" \(10 February 2022\)](#).

¹⁵² Ibid.

¹⁵³ Ibid, at 35-36.

¹⁵⁴ Ibid, at 35-36.

¹⁵⁵ [Australian Energy Regulator "Rate of return Instruments: Explanatory Statement" \(February 2023\)](#), at 16.

¹⁵⁶ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at [187]. This report has been published alongside this draft decision and can be found [here](#).

- 6.37 Sapere explained that firms and analysts seek to estimate the value today of an irreversible investment spanning many years. Therefore, they would use the ten-year risk-free rate to capture the average risk-free rate prevailing over the life of the asset.¹⁵⁷ However, regulators face a recursive problem where they effectively get to reset an asset's expected cash-flows every regulatory period. Sapere concluded that "just because firms and analysts can justifiably use the ten-year rate for one kind of valuation exercise, this does not imply it is relevant for a very different kind of valuation exercise".¹⁵⁸
- 6.38 We agree with Sapere's views on this. We consider that as the economic regulator, our task is different to firms', analysts', and independent valuation experts'. Namely, we do not estimate the cost of capital to be used as a discount rate for a business valuation over a long investment horizon. The power to reset prices in a regulatory context is central to our consideration. That is, regulated suppliers can reset their prices at the end of each regulatory period to reflect, among other things, changes in the risk-free rate. Through the regular resetting of prices, the premium for uncertainty over the long-term interest rates is being borne by users, rather than suppliers. Accordingly, suppliers' prices should not reflect a premium for the uncertainty of risk-free rates beyond the length of the regulatory period.
- 6.39 Similarly, the AER has acknowledged this point in its 2022 RORI draft explanatory statement:¹⁵⁹

Our task is to set a revenue allowance for the regulatory control period. Under our current approach, the allowed rate of return on equity is fixed for the duration of the regulatory control period and then reset at the beginning of the next regulatory control period using updated market data.

With 5-year resets, investors in regulated assets do not bear the risks associated with locking in the rate of return beyond a 5-year regulatory control period. Therefore, compensation for these risks is not part of the opportunity cost of equity capital and would not be necessary to attract investors.

Market practitioners value assets into perpetuity and therefore tend to use long-term estimates. By contrast we are undertaking a different task. We are determining a return on equity that will typically last for 5 years and then will be reset and applied to the residual value of the accumulated regulatory asset base going forward.

¹⁵⁷ Sapere Research Group "The New Zealand Commerce Commission's Approach to Setting the Term of the Risk-Free Rate: Review and Evaluation" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', 8 September 2025), at [17]. This report has been published alongside this draft decision and can be found [here](#).

¹⁵⁸ Ibid, at [17].

¹⁵⁹ [Australian Energy Regulator "Draft Rate of Return Instrument: Explanatory Statement" \(June 2022\)](#), at 94, 99-100.

- 6.40 The AER further commented that at any regulatory determination, it only estimates a ‘snapshot’ of cash-flows – revenue allowances for a single regulatory control period (typically five years), rather than cash-flows for an asset’s entire life.¹⁶⁰
- 6.41 In the 2013 IMs merits appeals judgement, the High Court analysed similar arguments made by Energy Appellants who argued for a ten-year term for the risk-free rate as this reflected the real-world borrowing practices.¹⁶¹ The High Court commented that:¹⁶²
- They effectively ignore the fact that prices are reset with each new five-year regulatory pricing period. As a matter of principle, we agree with the basic proposition that the fact that prices are reset every five years makes actual asset lives, and claims about what investors demand, irrelevant.... Moreover, we also consider it most unlikely that, were the yield curve inverse at the time the risk-free rate was being set, the supplier appellants would still be arguing for a ten-year term, and the lower rate that would result.
- 6.42 The High Court concluded that it was not persuaded it would be materially better for the term to be fixed at ten years.¹⁶³ The High Court stated that it reached this conclusion essentially because of its assessment of the strength of the principle that the term of the risk-free rate should be aligned with the regulatory term to avoid over and under compensation.¹⁶⁴
- 6.43 There have been no changes or new arguments put forward since the High Court confirmed our current approach. We agree with the AER that applying standard financial market practice ie, using a longer term for the risk-free rate, which on average will have a higher yield compared with a five-year term, would over-compensate regulated suppliers. Therefore, moving to a longer term will increase the value of the risk-free rate.¹⁶⁵
- 6.44 We appreciate that an increase in the value of the risk-free rate would be partially offset by a decrease in the TAMRP. But overall, we consider using a longer term for the risk-free rate would increase the overall cost of equity,¹⁶⁶ which would over-compensate regulated suppliers (and not limit their ability to extract excessive profits (s162(d))).
- 6.45 We have been price regulating for multiple regulatory periods across multiple different sectors including electricity, gas, and fibre, and there is no evidence that the use of the risk-free rate matching to the length of regulatory period has caused any under-investment.

¹⁶⁰ Ibid, at 107.

¹⁶¹ *Wellington International Airport Ltd & Ors v Commerce Commission* [2013] NZHC 3289, at [1252].

¹⁶² Ibid, at [1261] and [1264].

¹⁶³ Ibid, at [1287].

¹⁶⁴ Ibid, at [1287].

¹⁶⁵ Assuming an upward-sloping yield curve which is generally, but not always, the case.

¹⁶⁶ The cost of equity is calculated as “risk-free rate + equity beta*TAMRP”; as the equity beta is less than 1, we expect the overall cost of equity to increase as the risk-free rate increases.

Overseas regulators practice

- 6.46 Frontier Economics noted that a longer term for the risk-free rate is adopted by other regulators and the AER has adopted a ten-year risk-free rate in every decision since its inception.¹⁶⁷ Frontier’s view is that the issue of the term of the risk-free rate for the cost of equity is no longer a live one.¹⁶⁸
- 6.47 We acknowledge that common practice among overseas regulators is to use a risk-free rate with a longer term for the cost of equity. As Frontier Economics noted, most Australian regulators use a longer-term of the risk-free rate for equity to reflect commercial practice, while UK and US regulators adopt a risk-free rate with a term of at least ten years.¹⁶⁹
- 6.48 We also understand that AER switched to a five-year term in its 2022 RORI draft decision but changed back to a ten-year term in its final decision.
- 6.49 However, we do not agree that this issue is settled in the way that Frontier suggests: there is ongoing debate among experts, and there is not an agreed view on this issue. As AER stated in its 2022 RORI final decisions:¹⁷⁰

After extensive consultation and consideration, **our view is that the question of the term of return on equity must be settled through the exercise of regulatory judgement.** We have seen cogent cases made for employing a term that matches the length of the regulatory period and a term of 10 years, consistent with our current practices. Intelligent and reasonable people have reached different conclusions on this issue. **Stakeholders, experts, regulators and review panels have reached different conclusions supported by detailed and thorough reasons.** [Emphasis added]

- 6.50 One of the main reasons why AER changed its draft decision—from a five-year term and back to a ten-year term for the final decision—was that it saw merit in providing stability and predictability to its regulatory framework and agreed with stakeholders that there is a “high bar for change”.¹⁷¹
- 6.51 We have received conflicting reports from two experts, indicating that there is no clear consensus on this topic. We do not consider that there is a compelling reason for us to change our status quo. Applying the AER’s reasoning strengthens the case for maintaining our current approach of aligning the term of the risk-free rate for the cost of equity with the length of regulatory period.

¹⁶⁷ Frontier Economics "Return on debt and risk-free rate" (report to the Commerce Commission 'Fibre Input Methodologies Review 2027', July 2025), at 45-51. This report has been published alongside this draft decision and can be found [here](#).

¹⁶⁸ Ibid, at 51-53.

¹⁶⁹ Ibid, at 45-49.

¹⁷⁰ [Australian Energy Regulator “Rate of return Instruments: Explanatory Statement” \(February 2023\)](#), at 15.

¹⁷¹ Ibid, at 16.

How our draft decision links to the statutory purpose

- 6.52 We consider our draft decision on the approach to the risk-free rate for the cost of equity promotes the statutory purposes.¹⁷²
- 6.53 We consider that the most relevant outcomes of the statutory purposes for the cost of capital are that:¹⁷³
- 6.53.1 regulated suppliers have incentives to invest, including in replacement, upgraded, and new assets; and
 - 6.53.2 regulated suppliers/fibre service providers are limited in their ability to extract excessive profits.
- 6.54 We note that in the Fibre context, s 166(2)(b) of the Telecommunications Act has the additional requirement that we must, where relevant, make decisions that we consider best give, or are likely to best give effect to the promotion of workable competition in telecommunications market for the long-term benefit of end-users of telecommunications services.
- 6.55 We consider that maintaining the current approach to the risk-free rate for the cost of equity better promotes the statutory purpose in the following ways:
- 6.55.1 it better promotes incentives to invest as it better reflects the current expectations in the financial markets; therefore, it can provide better price signals to regulated suppliers and consumers/end-users;
 - 6.55.2 it better prevents regulated suppliers' ability to extract excessive profits as using a term longer than the length of regulatory period would over-compensate regulated suppliers; and
 - 6.55.3 in respect of s 166(2)(b) of the Act, it better promotes workable competition in telecommunication markets for the long-term benefit of end-users of telecommunications services as on balance, the prevailing approach better reflects the actual market that firms will be operating in.

¹⁷² See s 52A of the [Commerce Act 1986](#); and ss 162 and 166 of the [Telecommunications Act 2001](#).

¹⁷³ See s 52A of the [Commerce Act 1986](#); and s 162 of the [Telecommunications Act 2001](#).

Tax-adjusted Market Risk Premium

- 6.56 The market risk premium (MRP) measures the additional expected return over and above the risk-free rate required to compensate investors for holding the market portfolio. It represents the premium investors can expect to earn for bearing systematic (market) risk. The tax-adjusted market risk premium is the form of the MRP that is consistent with the SBL-CAPM, which reflects New Zealand's tax settings.
- 6.57 As set out in our Issues paper, we are considering our approach to estimating the TAMRP. We noted that there has been ongoing debate on the most appropriate methods to use and how to weight them since we first set the Part 4 IMs in 2010.

Our draft decision

- 6.58 Our draft decision is to amend the cost of capital IM relating to the tax-adjusted market risk premium (TAMRP) for the cost of equity by:
- 6.58.1 removing the clause that specifies a value for the TAMRP;
 - 6.58.2 introducing to the IMs the following methodology to estimate the TAMRP:
 - 6.58.2.1 estimate a mechanical "hybrid" TAMRP value by averaging the Ibbotson, Siegel 1 and Siegel 2 estimates;
 - 6.58.2.2 round the mechanical "hybrid" TAMRP value to the nearest 25 bps; and
 - 6.58.2.3 use conditioning variables to consider whether an adjustment to the TAMRP estimate is necessary where this adjustment would be restricted to +/- 0.25%;
 - 6.58.3 when estimating the TAMRP, our draft decision is that we will no longer place weight on the Survey method nor on foreign data, and the Dividend Growth Model (**DGM**) method will be used as a conditioning variable rather than as an input into the mechanical calculation of the TAMRP.
- 6.59 Our draft decision is to re-estimate the TAMRP at each PQ WACC determination unless we have estimated the TAMRP for another Part 4/6 industry within the previous 24 months of the relevant PQ WACC determination where, in that case, we will use the most recent TAMRP value. This has been set out in the draft amendment determination.
- 6.60 In reaching our draft decision, we have considered submissions from stakeholders, an expert report from Sapere, and the approaches taken by Australian and UK regulators.

Current IM settings

- 6.61 Our current approach, which has been in place since 2015, is to specify the TAMRP in the Part 4 and Part 6 IMs after it has been estimated. We estimate the TAMRP using five different methods, take the median of these five estimates and then round it to the nearest 50 bps to produce the final value specified in the IMs. The five methods are as follows:
- 6.61.1 Ibbotson method, which averages historical excess returns over a long time period;
 - 6.61.2 Siegel 1 method which aims to correct the Ibbotson estimate for pronounced unanticipated inflation during the mid to late 20th century;
 - 6.61.3 Siegel 2 method, which averages historical total market returns over a long time period and subtracts the current risk-free rate;
 - 6.61.4 DGM method, which estimates the MRP through discounting future dividends on existing shares to the current market value of those shares; and
 - 6.61.5 Surveys of investors' views on TAMRP, which are based on the Fernandez annual survey.
- 6.62 When determining the TAMRP to be specified in the IMs, we could calculate a conditional or unconditional estimate. Sapere explains the difference between the two in its report to the Commission: “in practical terms, the conditional TAMRP can be thought of as the time-varying risk premium applicable today to the next review period; the unconditional TAMRP is the constant risk premium applicable on average to all future review periods”.
- 6.63 In terms of our current approach, the Ibbotson and Siegel 1 methods estimate the unconditional TAMRP whilst the Siegel 2, DGM and Survey methods estimate the conditional TAMRP. By taking the median of these five estimates, we currently estimate a ‘hybrid’ TAMRP to specify in the IMs where more weight is placed on the unconditional TAMRP.¹⁷⁴
- 6.64 Before finalising the number to specify in the IMs, our current approach then compares the final TAMRP value we have estimated (using the approaches outlined above) with an equivalent foreign TAMRP ie, a TAMRP computed using foreign data, as a cross-check, and against TAMRP estimates by New Zealand investment banks as a further reasonableness check.

¹⁷⁴ Sapere Research Group explains that the use of the median pushes weight towards the unconditional MRP because, to the extent the conditional estimators can pick up time variation in the conditional MRP, conditional estimators will tend to appear at the extreme ends of the range and thus have limited impact on the median.

Reasons for our draft decision

Amending the approach to calculating the TAMRP

- 6.65 Our draft decision is to produce a TAMRP estimate closer to the time-varying (conditional) TAMRP. We consider this approach best promotes the statutory purposes by reflecting the current expectations in financial markets and will therefore provide better price signals to regulated suppliers (which promote incentives to invest and, where relevant, workable competition in telecommunications services) and consumers / end-users.¹⁷⁵
- 6.66 Our current approach aims to estimate the forward-looking TAMRP but does not distinguish between producing a conditional or unconditional estimate. Whilst not stated in past IM reviews, our current approach effectively estimates a hybrid TAMRP but places more weight on the long-term average (unconditional) TAMRP (as explained in para 6.63).
- 6.67 We note that, while there has not been a significant change in the evidence base underpinning this decision, except for evidence on the reliance of surveys, as explained in para 6.126-6.128, we consider that our draft decision is an improvement on the status quo as it better promotes the statutory purposes.
- 6.68 We also consider that our updated approach (and setting that out in the IMs) will promote certainty for regulated suppliers and consumers / end-users in relation to the rules, requirements, and processes applying to PQ resets under both regulatory regimes.
- 6.69 We have split the TAMRP estimation into two main parts:
- 6.69.1 We will estimate a mechanical “hybrid” TAMRP, which places more weight on the unconditional TAMRP, to strike a balance between incorporating current market conditions into the mechanical estimate and ensuring reliability of the estimate by anchoring it on historic data. This approach acknowledges our concern on the extent to which the conditional TAMRP can be reliably estimated in a mechanical way.
- 6.69.2 We will then incorporate current market expectations into our TAMRP estimate in a non-mechanical way. This approach recognises that an estimate which reflects current market conditions will best incentivise investment, and promote competition, where relevant, whilst limiting the ability to extract excessive profits (in accordance with the statutory purposes).

¹⁷⁵ It is also accepted by the AER that, in principle, the time-varying (conditional) MRP is most desirable to estimate as it reflects the MRP given the current state of the economy.

Specify the methodology to estimate the TAMRP in the IMs

- 6.70 Our draft decision is to specify the methodology to estimate the TAMRP in the IMs and then apply this methodology at each PQ WACC determination (except when a TAMRP has been estimated in the previous 24 months). This is a change from our current approach where we specify the value of the TAMRP as a percentage in the IMs.
- 6.71 We consider that a change in approach is necessary given our draft decision to produce an estimate closer to the time-varying (conditional) TAMRP. If we aimed to estimate the conditional TAMRP and then specified the value in the IMs, this would create the risk of time variation in the wrong direction being locked into the price path as the position of conditioning variables relative to their historic averages, and the value of the risk-free rate captured in the Siegel 2 estimate, may have changed. More frequent estimation of the TAMRP is therefore needed to ensure the TAMRP and cost of equity used in setting allowed revenues reflects current expectations in financial markets.
- 6.72 However, we recognise that our TAMRP estimate is an economy wide variable and may be relatively unchanged between PQ WACC determinations, which are closely spaced, in times where economic conditions are relatively stable. We consider estimating TAMRP at each PQ WACC determination may introduce avoidable cost into WACC determinations through unnecessary modelling, analysis and consultation.
- 6.73 To deal with this, our draft decision is that if the TAMRP has already been estimated within 24 months of a WACC determination for a Part 4/Part 6 industry price path, that TAMRP value will be applied.
- 6.74 Sapere made the argument that under the current system, the TAMRP for a given sector is effectively reviewed more often than once every seven years. When TAMRP is re-estimated under a Part 4 or Fibre IM Review, we have updated the TAMRP value specified in the IMs for all sectors through a subsequent IM amendment. This has been the case since the introduction of the Fibre IMs in 2020.
- 6.75 However, we are currently reviewing the economy-wide parameters for all sectors together as part of the Fibre IM Review 2027 and intend to continue this practice going forward. This means that the time between each TAMRP re-estimation would be closer to once every seven years, if we retained the current approach, and it would likely require frequent out-of-cycle amendments to ensure the TAMRP used in a price path reflects current expectations in financial markets.

- 6.76 While we did not receive any submissions related to specifying the value of TAMRP in the IMs in response to the Issues paper, First Gas submitted that we estimate the TAMRP as part of each DPP setting process in the 2023 Part 4 IM Review.¹⁷⁶ In the 2020 Fibre IM Review, Vocus, ENA and Vector all submitted that TAMRP should not be prescribed in the WACC IMs but should be determined at the start of each regulatory period.¹⁷⁷
- 6.77 Overall, we consider more frequent updating of the TAMRP is needed to ensure an up-to-date TAMRP is reflected in allowed revenues. As explained in para 6.65, producing a TAMRP estimate closer to the conditional TAMRP will better support incentives for efficient investment—and where relevant, promotion of workable competition in telecommunications markets— but this relies on the “current market conditions” captured in this estimate being relevant to the context in which investors and regulated suppliers are making decisions.
- 6.78 We also consider that specifying our methodology in the IMs still provides certainty for regulated suppliers and consumers / end-users in relation to the rules, requirements, and processes applying to the regulation (and is therefore consistent with s 174 of the Telecommunications Act and s 52R of the Commerce Act respectively).

Our draft methodology to estimate the TAMRP

Estimate a “hybrid” TAMRP by averaging the Ibbotson, Siegel 1 and Siegel 2 estimates

- 6.79 Our draft decision is to calculate a starting TAMRP estimate by taking the average of the Ibbotson, Siegel 1 and Siegel 2 estimates. We consider that calculating the mean is most appropriate to give explicit weight to all three methods; if we continued to take the median estimate, this would give practically no weight to Siegel 2 as we would expect estimates produced by this method to vary most over time.
- 6.80 In considering the appropriate weightings to place on Ibbotson, Siegel 1 and Siegel 2 to compute the average, it is important to note that the Ibbotson / Siegel 1 and Siegel 2 methods differ in two main ways:
- 6.80.1 Ibbotson / Siegel 1 assumes the expected market risk premium (MRP) is mean-reverting while Siegel 2 assumes the expected total market return (TMR) is mean-reverting; and
- 6.80.2 Ibbotson / Siegel 1 estimates are very stable over time and independent of changes in the current risk-free rate while Siegel 2 estimates move perfectly inversely with changes in the current risk-free rate.

¹⁷⁶ [Commerce Commission “Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision” \(13 December 2023\)](#), at 185.

¹⁷⁷ [Commerce Commission “Fibre input methodologies: Main final decisions – reasons paper” \(13 October 2020\)](#), at 455.

- 6.81 In regard to the differing assumptions about mean reversion, we do not take a stance on which assumption is more likely to be accurate. This is similar to the position taken by Dr Lally when discussing the importance of including Siegel 2 in the TAMRP estimation where he states that [Siegel 2] “assumes that the expected real market return is constant over time and this may be a better assumption than that underlying the historical averaging of excess returns (that the TAMRP is constant over time)”.¹⁷⁸
- 6.82 Turning to the implications of both methods, we consider the true expected MRP is likely to vary over time, and it is possible there is an inverse relationship between the MRP and RFR. However, this is unlikely to be on a 1:1 basis as implied by Siegel 2 as time variation in the total market return is not reflected by this method.
- 6.83 This was discussed by Sapere in its expert report which explained that both monetary policy and flight-to-safety considerations can induce a negative correlation between TAMRP and the risk-free rate, but it is an open question as to whether the correlation would be of the magnitude as implied in Siegel 2. If the expected market return is positively correlated with the risk-free rate, the negative correlation between the true TAMRP and the risk-free rate will be less than 1.
- 6.84 We are also concerned that the Siegel 2 method is no longer producing relevant estimates of the expected TAMRP. We consider Siegel 2 should produce estimates above and below the unconditional TAMRP over time if it is producing reasonable estimates of the conditional TAMRP. However, over the last eight years, if re-estimated at each four or five-year WACC determination, the Siegel 2 method has only produced TAMRP estimates below 7% (an upper-end estimate of the unconditional TAMRP) in one of these years.
- 6.85 Based on the above discussion, we consider 1/3 weight on the Siegel 2 estimator and 2/3 weight on the Ibbotson/Siegel 1 estimates, ie, equal weighting of each method, strikes a balance between recognising that the true expected MRP is likely to vary across time and the limitations of Siegel 2 as a conditional estimator. We also note that an adjustment will be made to this “hybrid” estimate to further take time variation into account, if necessary, through our use of conditioning variables.
- 6.86 If we compare our draft approach to our current approach, both of which place more weight on the unconditional than conditional estimate, for the 2015, 2019 and 2023 TAMRP estimation rounds, the mechanical estimates remain unchanged at (7%, 7.5%, 7%).¹⁷⁹ Given that we have seen no investment dis-incentive from our past WACC decisions, this gives us confidence that this refinement to the mechanical element can continue to achieve our statutory purposes.

¹⁷⁸ [Dr Martin Lally “Estimation of the TAMRP” \(report to the Commerce Commission, 10 April 2023\)](#), at 18.

¹⁷⁹ When averaging the Ibbotson, Siegel 1 and Siegel 2 TAMRP values as estimated in the 2015, 2019 and 2023 TAMRP re-estimation rounds.

The Ibbotson, Siegel 1 and Siegel 2 methods

- 6.87 We received submissions from Chorus and Incenta (on behalf of Chorus), in response to our Issues paper, that we should place 100% weight on the Siegel 2 method as it produces more reliable estimates of the MRP and improves stability in the cost of equity.
- 6.88 Chorus submitted that exclusively using Siegel 2 to estimate the MRP would better incentivise investors to maintain and invest in infrastructure whilst protecting consumers (from price shocks) as the cost of equity will remain very stable over time.¹⁸⁰
- 6.89 Incenta (on behalf of Chorus) submitted that:
- 6.89.1 exclusive reliance on Siegel 2 would “serve as an insurance policy to consumers and regulated business against the potential for a repeat of the recent low interest rate period (i.e., a substantial reduction in the cost of equity estimate), and substantial increase in interest rates (i.e., a further substantial increase in the cost of equity estimate)”;
 - 6.89.2 “there is good capital market evidence that the cost of equity does not move immediately and proportionately to the risk-free rate”, and that “this method [Siegel 2] is equivalent to how the UK regulators determine the cost of equity... which has been responsible for the greater stability of cost of capital allowances observed in the UK”;¹⁸¹ and
 - 6.89.3 alongside providing a more stable cost of equity, sole reliance on Siegel 2 may also provide a “more accurate estimate of the WACC”, noting that two advisers to the AER (CEPA and QTC) recommended placing some weight on the Siegel 2 approach.¹⁸²

¹⁸⁰ [Chorus “Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)” \(7 August 2025\)](#), at 20.

¹⁸¹ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#), at 4.

¹⁸² [Incenta Economic Consulting "Measures to improve the stability in WACC estimates" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, July 2022\)](#), at 17.

- 6.90 We also received a submission from Oxera (on behalf on the “Big Six” EDBs), as part of the 2023 IM Review, which submitted that TAMRP should be estimated using the Ibbotson and Siegel models but suggested 50% weight on Ibbotson and 50% weight on a weighted Siegel estimate. Oxera argued that more weight should be given to Siegel 2 relative to Siegel 1 as a negative relationship between the risk-free rate and MRP is supported by academic evidence and mean reversion of real market returns has been supported by Dr Lally.¹⁸³
- 6.91 We agree with Chorus and Incenta (on behalf of Chorus) that estimating the MRP using only Siegel 2 would create a very stable cost of equity as the MRP would move perfectly inversely with changes in the current risk-free rate. However, stability in allowed revenues is not part of the statutory purpose. The purpose is best promoted by producing a reliable estimate of the time-varying TAMRP.
- 6.92 In response to Oxera’s submission that we should give a 50% weighting to Ibbotson and then 50% to a weighted Siegel approach (giving more weight to Siegel 2 than Siegel 1), we find the reasoning behind these weightings to be inconsistent. Oxera’s submission raises no concern with Ibbotson, proposing to place 50% weight on the approach, however it does not agree with the relationship between the MRP and risk-free rate as implied by Siegel 1. This is despite the fact that Siegel 1, just like Ibbotson, estimates the long-run average of historical excess returns. The only difference is that Siegel 1 attempts to correct the Ibbotson estimate for a period of high unanticipated inflation during the mid-to-late 1900s. We do not find Oxera’s argument to down-weight Siegel 1 to be compelling.
- 6.93 There is a stark difference in views between Australian and UK regulators about whether a reliable estimate of the conditional MRP can be achieved using Siegel 2.¹⁸⁴

¹⁸³ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\)](#), at 34-38.

¹⁸⁴ [Commerce Commission “Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision” \(13 December 2023\)](#), at [4.412]- [4.416].

- 6.94 Australian regulators, for the most part, rely heavily on historical excess returns to estimate the MRP; this is the same as the Ibbotson method. The Siegel 2 approach is not used by any Australian regulator. The AER, ERA and QCA have considered the validity of the approach in past rate of return reviews, largely relying on the work of Partington and Satchell, but ultimately rejected placing any weight on the approach.¹⁸⁵ Australian regulators also place no weight on Siegel 1. The QCA used to incorporate this estimator into its approach but decided it is better to leave historical data unadjusted in its 2021 instrument review.¹⁸⁶
- 6.95 Conversely, Siegel 2 (or the TMR approach as it is referred to in the UK) is the primary approach used to estimate the MRP in the UK. This is based on a 2003 report commissioned by a consortium of UK regulators and a 2018 update to the initial report which continued to endorse the approach.¹⁸⁷
- 6.95.1 The 2018 report to UK regulators dismissed the assumption that the MRP is stable (which is often said to be the assumption underpinning the Ibbotson approach), based on strong evidence of a countercyclical risk premium.¹⁸⁸
- 6.95.2 The authors further stated that while the TMR methodology may not be precisely descriptively accurate (one-for-one negative relationship between the calculated MRP and RfR), it does at least capture the qualitative feature that risk premia tend to move counter-cyclically.¹⁸⁹
- 6.96 Overall, we consider that our proposed approach to place equal weight on Ibbotson, Siegel 1 and Siegel 2 (and then further consider current market conditions through conditioning variables) better promotes the statutory purposes compared to placing 100% weight on the Siegel 2 approach by producing an estimate closer to the conditional TAMRP that we have relatively more confidence in.

¹⁸⁵ [Australian Energy Regulator “Rate of Return Instrument: Explanatory Statement” \(February 2023\)](#), at 155-159; [Queensland Competition Authority “Rate of return review: Version 4” \(September 2024\)](#), at 66-69; [Economic Regulation Authority “Explanatory statement for the 2022 final gas rate of return instrument” \(16 December 2022\)](#), at 155-157; and [Economic Regulation Authority “Final Gas Rate of Return Guidelines Explanatory Statement: Meeting the requirements of the National Gas Rules” \(18 December 2018\)](#), at 169-170.

¹⁸⁶ [Queensland Competition Authority “Rate of return review: Version 4” \(September 2024\)](#), at 69-70.

¹⁸⁷ [Wright et al. “A Study into Certain Aspects of the Cost of Capital for Regulated Utilities in the UK” \(report to the UK economic regulators and the Office of Fair Trading, 13 February 2003\)](#).

¹⁸⁸ [Wright et al. “Estimating the cost of capital for implementation of price controls by UK Regulators” \(report to the UK Regulators Network, 2018\)](#), at 39.

¹⁸⁹ *Ibid*, at 48.

Averaging period of historical data

- 6.97 In estimating the historical average MRP as part of the Ibbotson and Siegel 1 methods or the historical average TMR as part of the Siegel 2 method, we need to decide on the appropriate period over which to average the data. To estimate the Ibbotson and Siegel 1 methods, our current approach averages historical excess returns from 1931 to present day. To estimate Siegel 2, we use a historical average of total market returns from 1900 to present day. Our draft decision is to maintain use of these averaging periods.
- 6.98 Sapere views our current application of the Ibbotson approach as uncontroversial and supports our use of a long time series, avoiding the temptation of using a short time series to “better reflect current conditions”. Sapere explains that a small sample Ibbotson estimate will result in a TAMRP that moves in precisely the wrong direction relative to the true conditional TAMRP.
- 6.99 However, Sapere does note that it is possible convergence to the true unconditional mean may not have yet occurred. Sapere explain that if plus or minus two percentage points is deemed the minimum acceptable level of precision then over 300 years of data is needed. Using our current data source, we will only have 95 years of data for the 2027 IM Review. As a potential solution, Sapere suggests use of a new data source: Finaeon’s Global Financial Database (**GFD**), which contains data going back to 1867.
- 6.100 If we look at the averaging period adopted by overseas regulators, the ERA decided to rely on data from 1958 onwards, largely based on advice from Pink Lake Analytics.^{190 191} The QCA and ESCOSA also exclusively use the 1958 series as it contains both a relatively large number of observations and consists of high-quality data.¹⁹² The AER decided to use data from 1988 onwards and accepted a less precise estimate for one that is “more representative of current investor expectations and macroeconomic conditions”.¹⁹³

¹⁹⁰ Pink Lake analytics was of the view that “minimising standard error is not a sufficient criterion when significant risks of structural breaks and data quality are extant in the longer-term data. These tangible risks can lead to significant bias in estimates of the forward looking MRP” and recommended omitting data prior to 1937. It also suggested removing data prior to 1958 as an option but acknowledged this comes at a cost of a loss of precision in the estimate.

¹⁹¹ [Economic Regulation Authority “Explanatory statement for the 2022 final gas rate of return instrument” \(16 December 2022\)](#), at 133.

¹⁹² [Queensland Competition Authority “Rate of return review: Version 4” \(September 2024\)](#), at 71; and [Essential Services Commission of South Australia “SA Water Regulatory Determination 2024 – Final Determination: Statement of Reasons” \(June 2024\)](#), at 309.

¹⁹³ [Australian Energy Regulator “Rate of Return Instrument: Explanatory Statement” \(February 2023\)](#), at 141.

- 6.101 Upon weighing up Sapere’s view that we should use the longer time series available in the GFD to better estimate the true unconditional mean, compared to the alternative approach taken by the ERA, QCA and ESCOSA of using a shorter time series to minimise the likelihood of structural breaks, our current approach of using data from 1931 onwards in our application of Ibbotson / Siegel 1 seems like a reasonable compromise. We note that there is a trade-off with using a longer time series between obtaining a more precise estimate of the true unconditional mean and increasing the likelihood of structural breaks and diminished data quality.
- 6.102 In relation to the averaging period of historical data, Sapere questions whether our use of Siegel 1 is still necessary. Firstly, given that additional data is now available from the GFD, use of the expanded dataset without adjustment may be sufficient as whatever caused the bias in a short time series should be offset in a long time series. Secondly, Sapere notes that by including both the Ibbotson and Siegel 1 estimator, we must be hoping that Ibbotson is upwardly biased whilst Siegel 1 is downwardly biased and that these biases offset.
- 6.103 However, given our draft decision to maintain the current averaging period, we consider Sapere’s suggestion to reconsider use of Siegel 1 if we obtain access to the GFD becomes moot. We also do not think it is an unreasonable assumption that the true unconditional MRP lies somewhere between the estimates produced by Ibbotson and Siegel 1.
- 6.104 In our current application of Siegel 2, we average real total market returns from 1900 to present day to increase the statistical confidence in the estimate. However, as outlined above, the Siegel 2 TAMRP estimates exceeding the unconditional estimate in every year except one over the past eight years may suggest that use of a long-term average dating back to 1900 no longer produces a relevant estimate of the expected unconditional TMR.
- 6.105 In our draft decision, we have decided to retain use of our current averaging period for historical data as part of the Siegel 2 approach – from 1900 to present day – but we are interested in feedback from stakeholders on whether an alternative averaging period should be used, particularly whether we should align Siegel 2 with Ibbotson / Siegel 1 and use data from 1931 onwards or whether we should only consider historical data after the introduction of inflation targeting in 1990. These alternative averaging periods are discussed more in the “Alternatives Considered” section.

Other matters raised by stakeholders

- 6.106 Incenta (on behalf of Chorus) submitted that the sourcing of inputs for the TAMRP has not always resulted in consistency with how the Commission estimates the parameter in question, providing examples of the risk-free rate and contemporaneous inflation forecast for which the Commission has well-established methods for deriving these inputs (including a date at which the input is determined), but this well-established method has typically not been applied. To remedy this, Incenta recommended that we internalise the TAMRP calculations and exercise discipline as to the method and timing of inputs against the method applied to WACC inputs more generally.¹⁹⁴
- 6.107 We agree with Incenta's submission that the same methods should be used to estimate the same parameters in the WACC calculations. Going forward, we intend to internalise the TAMRP calculation and where the Commission has an established method to estimate a particular input, we will use this method as part of the TAMRP calculation.
- 6.108 Incenta submitted that where a TAMRP for a term shorter than five years is required, we should derive the TAMRP based on a five year risk-free rate and adjust the TAMRP based on the prevailing risk-free rate term premium at the time of a PQ decision, rather than our current practice where the Ibbotson and Siegel 1 methods are adjusted using the historical average term premium and the Siegel 2, Survey and DGM methods are adjusted using the contemporaneous term premium.¹⁹⁵
- 6.109 Our current approach is best characterised by producing separate TAMRP estimates for each method relative to both four- and five-year risk-free rates rather than adjusting from a "base" five-year estimate.¹⁹⁶ In the 2019 and 2023 TAMRP re-estimation rounds, the final TAMRP values were the same if defined relative to a four- or five-year risk-free rate. This meant a single TAMRP value was specified in all IM determinations at each point in time.

¹⁹⁴ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#), 9-10.

¹⁹⁵ *Ibid*, at 6-7.

¹⁹⁶ The Ibbotson TAMRP is initially defined relative to a ten-year risk-free rate and is adjusted using the historic average term premium (the average differential for ten over four- or five-year risk-free rates depending on the length of the regulatory period). The Siegel 1 TAMRP is calculated using the long-term expected real risk-free rate for four or five years ahead. The Siegel 2 TAMRP calculation subtracts off the current four- or five-year risk-free rate from an estimate of the unconditional total market return whilst the DGM TAMRP calculation does the same but from an estimate of the conditional total market return.

6.110 Under our draft approach, the TAMRP will be re-estimated at each PQ WACC determination and will be defined relative to a risk-free rate with a term equal to the length of the relevant regulatory period, unless the TAMRP has already been re-estimated for a different Part 4 / 6 industry in the past 24 months, then that re-estimated value will be used. We acknowledge this may mean a TAMRP defined relative to a four-year risk-free rate is adopted for a five-year regulatory period (and vice versa); however, given that our draft methodology produces the same mechanical hybrid TAMRP values if defined relative to a four- or five- year risk-free rate when applied to the 2019 and 2023 values, we do not consider this a concern.

Round the hybrid TAMRP to the nearest 25 bps

6.111 Our draft decision is to round the TAMRP estimate to the nearest 25 bps. This is a change from our current approach which rounds the estimate to the nearest 50 bps.

6.112 Our current approach is based on the methodology developed by Dr Lally to estimate the TAMRP. Dr Lally explains that rounding to the nearest 50 bps:

6.112.1 saves regulators the need and cost of trying to estimate the TAMRP to a much higher degree of precision than is actually attainable; and

6.112.2 limits lobbying over changes in the TAMRP estimate that are too small to have any confidence in.¹⁹⁷

6.113 We consider that due to our three-estimator approach relying heavily on historical data (and on the risk-free rate which is directly observable as part of the Siegel 2 method), this negates Lally's concern about "lobbying" by stakeholders regarding the mechanical TAMRP estimate. We have also considered overseas regulatory practice and the need for internal consistency between the TAMRP and equity beta, both of which suggest that a tighter rounding approach is warranted.

6.114 As part of the 2023 IM Review, we received a submission from Oxera (on behalf of the "Big Six" EDBs) that we should reconsider our approach of rounding the TAMRP to the nearest 0.5% for three main reasons:

6.114.1 The accuracy of the NZCC TAMRP estimate would be improved once survey data is excluded (or de-emphasised) from the evidence pool;¹⁹⁸

6.114.2 The NZCC's approach could have a non-negligible impact on overall allowed revenue where the decimals of the TAMRP estimate are close to 0.25% or 0.75%; and

¹⁹⁷ [Commerce Commission "Fibre input methodologies: Main final decisions – reasons paper" \(13 October 2020\)](#), at 452-453.

¹⁹⁸ Oxera also recommended removing the DGM from our estimation approach in its second submission.

- 6.114.3 Reducing the rounding approach would be aligned with the approaches adopted by the AER (round to the nearest 0.1%) and Ofgem (round to the nearest 0.25%).¹⁹⁹
- 6.115 Sapere considers our current approach to rounding in its expert report. The report concludes that that the arguments in favour of rounding are not overly strong, but neither are the arguments against it.
- 6.116 As part of the analysis, Sapere assesses the appropriate level of rounding on TAMRP with the requirement that the ratio of allowed rounding to standard error be similar for all parameters in the cost of equity. It concludes that while the rounding of TAMRP is inconsistent with that of the risk-free rate and beta, these inconsistencies work in opposite directions so overall there is no systematic inconsistency. Sapere explains that for TAMRP to be consistent with the risk-free rate it would have to be rounded to the nearest 1.5% but for consistency with beta, TAMRP should be rounded to the nearest 0.1%.
- 6.117 We also note that regulatory practice across Australia and the UK suggests a tighter rounding approach. Australian practice is to round the final MRP estimate to the nearest 0.1%, whilst Ofwat rounds the TMR estimate to the nearest 0.01% and Ofgem has rounded its point estimate for RIIO-3 to the nearest 0.1%..²⁰⁰
- 6.118 Overall, we consider that tightening the rounding approach by rounding to the nearest 25 bps improves internal consistency between the TAMRP and equity beta, the product of which is used in the SBL-CAPM, whilst avoiding giving the impression of “false precision” of the TAMRP estimate where it may not be practically achievable.

Use conditioning variables to consider whether an adjustment to the hybrid TAMRP is necessary

- 6.119 Our draft decision adopts the use of conditioning variables which will allow us to consider whether an adjustment to the hybrid TAMRP is necessary to better reflect current expectations in financial markets in order to promote the statutory purposes.

¹⁹⁹ [Oxera "Review of the NZCC's WACC-setting methodology" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the for the Part 4 Input Methodologies Review 2023' \(report prepared for the 'Big Six' electricity distribution businesses, 31 January 2023\)](#), at 30.

²⁰⁰ [Economic Regulation Authority “Explanatory statement for the 2022 final gas rate of return instrument” \(16 December 2022\)](#), at 158; [Australian Energy Regulator “Rate of Return Instrument: Explanatory Statement” \(February 2023\)](#), at 11; [Independent Pricing and Regulatory Tribunal “WACC Biannual Update” \(21 August 2025\)](#), at 3; [Essential Services Commission of South Australia “SA Water Regulatory Determination 2024 – Final Determination: Statement of Reasons” \(June 2024\)](#), at 307; [Ofwat “PR24 final determinations: Aligning risk and return – allowed return appendix” \(March 2025\)](#), at 23; and [Ofgem “RIIO-3 Final Determinations – Finance Annex” \(4 December 2025\)](#), at 51.

- 6.120 Conditioning variables are readily available market data which allow current market conditions to be taken into account. Specifically, conditioning variables provide a picture of the level of uncertainty in the market. Adjusting the hybrid TAMRP based on conditioning variables not only shifts our estimate closer to the conditional TAMRP – better promoting the statutory purposes – but also captures changes in the TAMRP that occur through changes in the expected total market return rather than through movements in the risk-free rate. In periods of heightened uncertainty, investors may demand higher returns on equities before the risk-free rate responds, and conditioning variables enable us to reflect that dynamic.²⁰¹
- 6.121 Conditioning variables are typically used by regulators by comparing the current position of the variables to their respective historical averages. If conditioning variables are above historic levels, the regulator will consider if this is sufficiently compelling to necessitate an upward discretionary adjustment, and vice versa if conditioning variables are below historic levels – ie, the regulator may exercise discretion if the majority of conditioning variables suggest an adjustment in a certain direction. We intend to use conditioning variables in a similar way.
- 6.122 We note that the ERA, AER, and QCA use “conditioning variables” in various forms to reflect current expectations in financial markets.²⁰²
- 6.122.1 The ERA uses the AA bond five-year default spread, the five-year interest rate swap spread, market dividend yields, and implied volatility.²⁰³
- 6.122.2 The AER uses dividend yields, implied volatility and credit spreads.²⁰⁴
- 6.122.3 The QCA uses estimates from the DGM to provide directional guidance to the overall cost of equity.²⁰⁵
- 6.123 For our draft decision, we have decided to adopt conditioning variables based on what equivalent NZ data is available. Given that the New Zealand Exchange (**NZX**) does not have any bond indices and its stock derivatives market does not have the liquidity to support a volatility index, we have decided to use DGM estimates and the interest rate swap spread as conditioning variables.²⁰⁶

²⁰¹ The Siegel 2 approach only reflects current market conditions through the use of the current risk-free rate.

²⁰² The ERA has recently released a discussion paper for the 2026 gas rate of return instrument review in which it is considering discontinuing the use of conditioning variables given the imprecision and uncertainty in the application of the approach.

²⁰³ [Economic Regulation Authority “Explanatory statement for the 2022 final gas rate of return instrument” \(16 December 2022\)](#), at 153.

²⁰⁴ [Australian Energy Regulator “Rate of Return Instrument: Explanatory Statement” \(February 2023\)](#), at 155.

²⁰⁵ [Queensland Competition Authority “Rate of return review: Version 4” \(September 2024\)](#), at 65.

²⁰⁶ By using DGM estimates as opposed to dividend yields, we will be comparing the DGM estimate with the hybrid estimate as opposed to historic levels of the DGM estimate.

- 6.124 We acknowledge that it would be more desirable to have a larger suite of conditioning variables to obtain a more fulsome picture of current expectations in financial markets. As such, we are interested in views from stakeholders on how to refine our use of conditioning variables or suggest possible variables we have not considered. If we consider an adjustment to the rounded mechanical “hybrid” TAMRP estimate is necessary after considering conditioning variables, we will adjust upwards or downwards to the next 25 bps interval (ie, for a mechanical “hybrid” estimate of 7.1%, we would round to 7.0% and then, depending on the information provided by conditioning variables, adjust to 6.75% or 7.25%).

Remove the DGM and Survey methods from the mechanical estimation of the TAMRP

- 6.125 In the 2023 IM Review, we decided to retain use of both the DGM and survey evidence as both are “forward-looking approaches” and using a forward-looking or ex-ante approach is consistent with the TAMRP in theory being an ex-ante measure. We also noted that the DGM is only one of five approaches, and our approach moderates the effect the DGM estimates have on TAMRP.²⁰⁷ However, after further considering the issue internally, and having regard to the advice from the Sapere, our view on whether it is appropriate to include DGM and Surveys in a mechanistic way has changed.

Survey evidence

- 6.126 Our draft decision is to remove the survey method from the estimation of the TAMRP. We have considered analysis provided by Sapere in reaching our draft decision. Sapere concluded that the Survey method seems to pick up time variation in precisely the wrong direction, likely due to survey responses primarily reflecting recent returns. We also note that overseas regulators place limited weight on survey evidence and stakeholders in the past have been supportive of removing the method.
- 6.127 Sapere sets out a number of concerns regarding the Survey method in its report and suggests the Commission reconsider the value of the information obtained from using this approach. Sapere expresses doubt that survey responses are likely to represent a source of high-quality, independent information and points to empirical evidence which suggests survey evidence provides the same information as if the Ibbotson approach was applied to a recent sample of excess returns, which is likely to be very misleading.
- 6.128 Furthermore, upon examination of the volatility of each estimator and the correlation between estimators, not only does survey evidence have surprisingly low volatility, which Sapere notes could indicate that respondents simply repeat the Commission’s most recent decision, but the surveys method is also strongly negatively correlated with the other two conditional estimators. This is an obvious concern as valid conditional estimators should move together.

²⁰⁷ [Commerce Commission “Cost of capital topic paper – Part 4 Input Methodologies Review 2023 – Final decision” \(13 December 2023\)](#), at 189.

- 6.129 As part of the 2023 IM Review, Oxera (on behalf of the “Big Six” EDBs) submitted that behavioural biases mean survey results should be interpreted with a high degree of caution and overall recommended we discontinue using the Survey method.²⁰⁸
- 6.130 We also note that Australian and UK regulators either place no weight on survey evidence or use the results as a cross-check of the MRP estimate only.
- 6.130.1 The QCA and ERA give no weight to survey evidence, with the QCA noting that it was unlikely to contribute any meaningful or additional information in estimating the MRP and should not be used in future reviews.²⁰⁹
- 6.130.2 The AER and ESCOCA use survey evidence to cross-check their MRP estimates while Ofwat considers surveys of market participants as an overall cross-check of the cost of equity. ESCOSA explained that survey results were appropriate for a cross-check only due to the opacity of raw survey results and (lack of) robustness in survey design.²¹⁰ The AER noted the limitations associated with the approach and considered the results are not at a level of reliability to directly feed into the estimation of the MRP.²¹¹
- 6.131 Overall, we consider that removing survey evidence from our estimation approach will better promote the statutory purposes by not biasing the estimate in the wrong direction to the likely movement of the true time-varying (conditional) TAMRP.

Dividend Growth Model (DGM) method

- 6.132 Our draft decision removes the DGM from the mechanical estimation of the TAMRP – ie, only use the DGM in a judgement-based way. Specifically, we have decided to use the DGM as one of our conditioning variables to further incorporate time variation into the TAMRP estimate. We consider this strikes an appropriate balance between recognising that, theoretically, the DGM is a valid estimator of the time-varying TAMRP, and the extensive practical limitations associated with the model.

²⁰⁸ [Oxera "Review of the NZCC's WACC-setting methodology" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the for the Part 4 Input Methodologies Review 2023' \(report prepared for the 'Big Six' electricity distribution businesses, 31 January 2023\)](#), at 27.

²⁰⁹ [Queensland Competition Authority “Rate of return review: Version 4” \(September 2024\)](#), at 75.

²¹⁰ [Essential Services Commission of South Australia “SA Water Regulatory Determination 2024 – Final Determination: Statement of Reasons” \(June 2024\)](#), at 308-309.

²¹¹ [Australian Energy Regulator “Rate of return instrument: Explanatory Statement \(February 2023\)](#), at 154.

- 6.133 A common criticism of the DGM is its high sensitivity to changes in the (contestable) value of inputs. This concern was raised by Oxera (on behalf of the “Big Six” EDBs) as part of the 2023 IM Review, and Sapere in its expert report to the Commission.
- 6.133.1 Oxera submitted that the DGM is highly sensitive to input assumptions and is therefore less credible than the Ibbotson model and Siegel models.²¹² Overall, Oxera recommended we give no weight to the DGM method.²¹³
- 6.133.2 Sapere demonstrates that, based on a simplified version of the model, the DGM estimate of the TAMRP moves with both the market dividend-price ratio (D/P) and the expected long-term dividend growth rate (g) on a greater than 1-to-1 basis.
- 6.133.3 When applied to our current application of the DGM, variation in the market dividend-price ratio (all else equal) produces a TAMRP range that Sapere concludes is too wide to be useful in a regulatory setting. However, it does note that our current approach to estimating the growth rate reduces the possibility of TAMRP volatility as the estimate is unlikely to change much, or rapidly, over time.
- 6.134 If we consider how the DGM is used by Australian and UK regulators, varying degrees of weight are placed on the DGM, although almost all regulators acknowledge the limitations associated with the method and use it with caution.
- 6.134.1 Several regulators have chosen to down-weight or use the DGM only as a directional indicator. The AER decided in its 2018 review to reduce reliance on the model due to issues such as upward bias in analyst forecasts, sticky dividends, and uncertainty around growth rates.^{214 215} Similarly, the QCA retains the DGM for directional guidance on the overall cost of equity but applies no mechanical weight, and the ERA places less weight on the DGM compared to the historical average of excess returns, moving away from its earlier equal-weight approach.^{216 217} In the UK, Ofwat uses “forward-looking” approaches as a cross-check on the overall cost of equity only.²¹⁸

²¹² [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\)](#), at 34.

²¹³ *Ibid*, at 38.

²¹⁴ [Australian Energy Regulator “Rate of return instrument: Explanatory Statement” \(December 2018\)](#), at 221.

²¹⁵ *Ibid*, at 146.

²¹⁶ [Queensland Competition Authority “Rate of return review: Version 4” \(September 2024\)](#), at 65.

²¹⁷ [Economic Regulation Authority “Explanatory statement for the 2022 final gas rate of return instrument” \(16 December 2022\)](#), at 123-124.

²¹⁸ [Ofwat “PR24 final determinations: Aligning risk and return – allowed return appendix” \(March 2025\)](#), at 23.

- 6.134.2 Other regulators have opted to exclude the DGM entirely due to its practical limitations. ESCOSA places no weight on the DGM, noting concern with the model’s reliance on uncertain long-term growth rates.²¹⁹ Ofgem rejected use of the DGM as a cross-check, highlighting issues such as the model’s dependence on perpetual dividend growth assumptions and assumptions about future growth rates which are uncertain.²²⁰
- 6.134.3 IPART stands out as an outlier among these regulators. It uses DGM estimates as a direct input to calculate the current MRP and then applies equal weight to historical and current MRP values, which gives substantial influence to the DGM in determining the final MRP.²²¹
- 6.135 Overall, we have limited confidence in the ability of the DGM to produce reliable estimates of the time-varying (conditional) TAMRP. We consider mechanical use of the model has the potential to bias the TAMRP estimate picked up as the median, even more so once the Survey method is removed.
- 6.136 However, we consider there is value in retaining some consideration of the DGM. The ERA and IPART place varying degrees of weight on the DGM method and Sapere’s analysis shows a weak positive correlation between the DGM and Siegel 2 methods (methods you would expect to move in the same direction if accurately picking up true underlying time variation). As such, our draft decision is to use the DGM as a conditioning variable, rather than remove it altogether.
- 6.137 Our draft decision retains our current approach to estimating the DGM TAMRP ie, use a three-stage model, but address the concern raised by Sapere in its report that our DGM TAMRP estimate is based on the price observed on a single day; Sapere explains that “on any given day, a market price can be above or below true market value for any number of reasons”.²²² We agree with Sapere that applying an averaging procedure would improve the robustness of our application of the DGM by “guarding against daily prices that are excessively high or low”, and we consider calculating an average DGM estimate over a month to be a reasonable approach.

²¹⁹ [Essential Services Commission of South Australia “SA Water Regulatory Determination 2024 – Final Determination: Statement of Reasons” \(June 2024\)](#), at 311.

²²⁰ [Ofgem “RIIO-3 Draft Determinations – Finance Annex” \(1 July 2025\)](#), at 67.

²²¹ [Independent Pricing and Regulatory Tribunal “Review of our WACC method” \(February 2018\)](#), at 50-52.

²²² A three-stage DGM has a first stage which uses explicit forecasts of expected dividends, an intermediate stage in which the growth rate of expected dividends is assumed to transition between the short-term growth rate and long-term growth rate, and a final stage in which the growth rate of expected dividends is assumed to be equal to the long-term growth rate.

- 6.138 We will continue to use the three-stage DGM which involves estimates of expected dividends for the first three years, followed by dividends which grow at a rate that converges in a linear fashion from the expected growth rate in the third year to the long run expected growth rate (applicable from year 11).²²³
- 6.139 In terms of inputs required to estimate the long run expected dividend growth rate, we will:
- 6.139.1 continue to use a figure of 2% for the long run expected inflation rate;
 - 6.139.2 continue deduct 1% for the net creation of new shares from new companies and new share issues (net of buybacks) from existing companies; and,
 - 6.139.3 update the average real GDP growth rate figure of 3% from 1900-2022 to include more recent data when the TAMRP is re-estimated.

Remove the foreign data cross-check from the TAMRP estimation approach

- 6.140 Our draft decision is to no longer use foreign data to cross-check the TAMRP estimate. We consider there is limited benefit in using foreign data to refine our unconditional TAMRP estimates and consider that using foreign data to inform the NZ conditional TAMRP is problematic as local market conditions will differ across countries. We have considered analysis provided by Sapere and the approaches of Australian and UK regulators in reaching our draft decision.
- 6.141 Our current approach repeats the methodology explained in para 6.61 (taking the median of five MRP estimates and rounding to the nearest 50 bps), but this time using foreign data. We then compare the NZ TAMRP estimate to the “foreign” TAMRP estimate. This cross-check is based on findings from Lally and Randall (2015) that the optimal estimator for a country should place high weight on foreign data because estimates using only local data are very noisy and the true MRPs do not vary greatly across countries.²²⁴
- 6.142 Sapere examines our use of foreign data in its report and notes that the Commission’s approach consists of identifying countries that “look similar” to NZ and then assuming that this similarity is associated with a similar market risk premium. However, it views this to be a potentially strong assumption and explains that while using foreign data to supplement NZ data reduces sampling variation, it also risks introducing intrinsic variation.²²⁵

²²³ We adjust the three-stage model from its basic form to reflect a continuous stream of dividends with an average term till receipt of six months and to account for analysis done part way through the calendar year.

²²⁴ Sapere Research Group note that the Lally and Randall (2015) analysis only considers the Ibbotson approach and hence their argument only applies to the unconditional TAMRP.

²²⁵ Sampling variation refers to variation that arises because we observe only a sample from the population, not the entire population. Intrinsic variation refers to real differences in the underlying populations or processes themselves.

- 6.143 Sapere further notes that Lally and Randall’s analysis only considers the Ibbotson approach and considers that while it is not inherently implausible that unconditional MRPs are identical across countries, local conditions (eg, stage of the business cycle, monetary policy settings and so on) will clearly differ. This means using foreign data only makes sense in estimating the conditional TAMRP if markets are either perfectly integrated or just happen to have the same MRP by some “happy circumstance”.
- 6.144 In regard to using foreign data to cross-check the Ibbotson estimate (which was the context of Lally and Randall’s analysis), we acknowledge the trade-off raised by Sapere between reducing sampling variation and introducing intrinsic variation when combining MRP estimates across countries. In other words, combining estimates improves precision, but this may create a more precise estimate of some NZ/foreign hybrid MRP that has no real meaning if heterogeneity between countries is not taken into account. To understand the difference that you would expect to see between country estimates due to factors such as differing economic structures, market index weights or regulatory systems, intrinsic variation needs to be quantified.
- 6.145 If we compare the NZ Ibbotson estimate to the “foreign” Ibbotson estimate, they have only differed by 0.1% for TAMRP values relative to a five-year risk-free rate and 0.2% relative to a four-year risk-free rate in the last three rounds of the TAMRP estimation. If we use the value of intrinsic variation quantified by Lally and Randall (2015) of 0.26%, the observed difference between estimates is consistent with the level of real heterogeneity we would expect, which indicates that no adjustment should be made to avoid diluting the meaning of the NZ specific MRP. Accordingly, foreign data has not provided any additional benefit in the form of helping us to improve the precision of the Ibbotson estimate.
- 6.146 As mentioned above, Sapere raised particular concern with our use of foreign data in estimating the conditional TAMRP. We agree that using foreign data to inform the NZ conditional TAMRP is problematic beyond just the potential for intrinsic variation as current market conditions will differ across countries.
- 6.147 We also note that, to the best of our knowledge, no other regulator incorporates foreign data into its MRP estimation approach. Overseas regulators provide limited reasoning for this decision, but, presumably, it is for similar reasons as outlined by Sapere above and by the AER in its 2018 rate of return review, that there is simply a lack of comparability of MRPs across countries.²²⁶
- 6.148 Overall, we consider removing the foreign data cross-check will better promote the statutory purposes by allowing us to produce our best estimate of the compensation required by investors for bearing New Zealand-specific systematic risk. At a high level, if our TAMRP estimate is pulled up by foreign data, this risks excessive profits for regulated suppliers, and if pulled down, investors may reallocate capital elsewhere.

²²⁶ [Australian Energy Regulator “Rate of return instrument: Explanatory Statement” \(December 2018\)](#), at 93.

Alternatives considered

Retain mechanical use of the Dividend Growth Model (DGM)

- 6.149 We also considered including the DGM in the mechanical estimation by taking a simple average of the Ibbotson, Siegel 1, Siegel 2 and DGM estimates and then rounding this value to the nearest 25 bps.
- 6.150 Our preference is to use the DGM as a conditioning variable (as set out in the draft decision). The conditional TAMRP estimate produced by this method, alongside other information on current market conditions, provides information on whether an adjustment to the hybrid TAMRP is necessary to better reflect current expectations in financial markets. An alternative use of the DGM would be to continue placing explicit weight on the method in the mechanical estimation of the TAMRP. We consider that this alternative option would still be an improvement on the current approach by producing an estimate closer to the conditional TAMRP, which better promotes the statutory purposes than the unconditional TAMRP. The practical limitations associated with using the DGM to produce a point estimate of the TAMRP are why we consider this approach inferior to our draft methodology.

Shorten the averaging period of historical data in the application of Siegel 2

- 6.151 Our current application of the Siegel 2 approach involves using an average of real total market returns from 1900 to present day. We then convert this value into its current nominal counterpart and subtract off the current risk-free rate. As explained in para 6.4, we have some concern that the long time series used to calculate the average real total market return may not produce a relevant estimate of the forward-looking unconditional total market return in a lower interest rate environment and this is potentially causing upwardly biased TAMRP estimates. An alternative would be to shorten the averaging period used to calculate the real TMR. There is a trade-off between increasing statistical confidence in the estimate and minimising the likelihood of structural breaks when choosing an appropriate averaging period. On balance, we have decided to retain the longer time series in our draft decision.
- 6.152 Alternative options we have considered are to align the averaging period used in Siegel 2 with Ibbotson / Siegel 1 – ie, use historical data from 1931 onwards – or to only use historical data after the onset of inflation targeting which shifted New Zealand to a structurally lower interest rate environment – ie, use historical data from 1990 onwards. Table 6.1 illustrates the impact of these changes on the 2019 and 2023 Siegel 2 TAMRP estimates and the hybrid TAMRP estimates using our draft approach.

Table 6.1 Siegel 2 TAMRP with alternative averaging periods in 2019 and 2023²²⁷

	2019		2023	
	Siegel 2 TAMRP	Hybrid TAMRP using draft approach	Siegel 2 TAMRP	Hybrid TAMRP using draft approach
1900 onwards	9.42%	7.50%	7.68%	7.00%
1931 onwards	8.52%	7.25%	6.75%	6.75%
1990 onwards	8.51%	7.25%	6.51%	6.50%

High level specification of the TAMRP methodology in the IMs

- 6.153 Our draft decision is to specify the methodology to estimate the TAMRP in the IMs and apply this methodology at each WACC determination, unless a TAMRP value has already been estimated in the past 24 months, then that value will be used.
- 6.154 As our current approach specifies the TAMRP value only in the IMs, this change has required us to draft IMs to reflect the methodology we will apply to estimate the TAMRP, for the first time.
- 6.155 Our draft decision is to specify the TAMRP methodology in detail in the IMs as we consider this better promotes the IM purposes in s 174 of the Telecommunications Act and s 52R of the Commerce Act. We consider this level of specification should allow stakeholders to approximate the hybrid TAMRP leading up to a WACC determination.
- 6.156 An alternative we considered is whether we should amend the IMs to include a higher-level description of our draft approach (but not the formulas). This would be accompanied by a TAMRP model which details the specifics of our methodology and the inputs used. However, we considered this alternative would provide less certainty than specifying the methodology or value in the IMs.

Consistency between TAMRP and the risk-free rate for equity

- 6.157 We received five submissions commenting on the internal consistency between the approach to risk-free rate for equity and TAMRP:
- 6.157.1 Transpower submitted that we should ensure consistency between the risk-free rate and TAMRP approach to maintain a credible proxy for the opportunity cost of capital relevant to infrastructure investment decisions.²²⁸

²²⁷ The other inputs used to produce the 2019 and 2023 Siegel 2 TAMRP values – ie, forecast inflation and current risk-free rate – are unchanged.

²²⁸ [Transpower "Fibre Input Methodologies review 2027 - Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 4.

- 6.157.2 NZAA submitted that any changes to the risk-free rate for equity would warrant a reconsideration of the approach to estimating the TAMRP to ensure the estimate remains accurate and internally consistent.²²⁹
- 6.157.3 Incenta (on behalf of Chorus) suggested two options to stabilise the cost of equity. One of them was to move to a five-year trailing average approach combined with the current five approaches to TAMRP.²³⁰ Chorus' main submission supported these suggestions.²³¹
- 6.157.4 NZAA (in its cross-submission) did not support Incenta's suggested equity stabilisation mechanism as it would blunt investment signals and distort risk allocation.²³²
- 6.158 We agree with Transpower and NZAA's view on ensuring consistency between the approach to the risk-free rate and the TAMRP. We consider that the approach to the risk-free rate for the cost of equity is interrelated to the approach to estimating the TAMRP. In the past, consistent with the use of a five-year (and four-year) term for the risk-free rate in the CAPM, we also used a five-year (and four-year) risk-free rate when estimating the TAMRP.
- 6.159 Apart from that, as mentioned in our 2023 IM Review Final Reasons Paper, we note that the TAMRP is a forward-looking concept which cannot be directly observed.²³³ The consistency has also been reflected in using a prevailing approach to the risk-free rate for the cost of equity.
- 6.160 With respect to Incenta's suggestion on the alternative approach to stabilise the cost of equity, we have set out the reasons for maintaining a prevailing approach in our earlier discussion on the risk-free rate for the cost of equity. A prevailing approach better reflects the current market conditions compared to a trailing average approach. Given the cost of equity is forward-looking, we do not consider it is appropriate to adopt a trailing average approach to the risk-free rate for the cost of equity to stabilise the cost of equity. This would not be consistent with the purpose of the statutes.
- 6.161 We would also need to update the risk-free rate annually if we used a trailing average approach to the risk-free rate. This would create an inconsistency if the risk-free rate for the cost of equity was updated annually but the TAMRP was not.

²²⁹ [NZ Airports Association "Submission on Fibre Input Methodologies Review issues paper" \(7 August 2025\)](#), at [17]-[18].

²³⁰ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\)](#).

²³¹ [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 20.

²³² [NZ Airports Association "Cross-submission on Fibre Input Methodologies Review issues paper" \(27 August 2025\)](#), at 2.

²³³ [Commerce Commission "Input Methodologies \(Electricity Distribution and Gas Pipeline Services\): Reasons Paper" \(December 2010\)](#), at [6.5.6].

Equity issuance costs

- 6.162 Equity issuance costs are paid by an entity when it raises equity from new or existing shareholders. In our Issues paper, we set out that the topic of equity issuance allowance is within the scope of Tranche 1.
- 6.163 When we set the Fibre IMs in 2020 and when we reviewed the Part 4 IMs in 2023, we decided not to include an allowance for equity issuance costs for Part 6 or Part 4 regulated businesses/providers.

Our draft decision

- 6.164 Our draft decision is to maintain our current approach of not including an allowance for equity issuance costs for Part 6 and Part 4 regulated businesses/providers.

Current IM settings

- 6.165 We do not provide an equity issuance costs allowance under the current cost of capital IMs for either Part 6 or Part 4.

Reasons for our draft decision

- 6.166 We received one submission (from Chorus) on this topic. Chorus submitted that the reasons for not having an equity issuance allowance do not apply to Chorus because:²³⁴
- 6.166.1 Chorus received Crown funding which is debt and equity-like security. Raising capital through a parallel debt structure was crucial to maintaining Chorus credit rating; and
 - 6.166.2 the equity-like portion does not exist in perpetuity and will fall from 50% in 2025 to 0% by 2031 and 2046 (depending on S&P or Moody's ratings).

²³⁴ [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at 21.

- 6.167 We considered whether to allow for equity issuance costs when we established the Part 4 IMs in 2010,²³⁵ when we reviewed the Part 4 IMs in 2016 and 2023,^{236, 237} and in establishing the Fibre IMs in 2020.²³⁸ We decided not to allow for equity issuance costs given the reasons below:
- 6.167.1 equity capital is normally available in perpetuity and does not need refinancing;
 - 6.167.2 retaining profits can be used to finance growth in the asset base without incurring issuance costs; and
 - 6.167.3 if there are additional equity requirements, they are typically a small fraction of the additional borrowing requirements, and variations in equity can be negative depending on cash-flows.
- 6.168 In general, we consider that the current approach of not including an allowance for equity issuance costs is still appropriate. We maintain our view that regulated suppliers/providers should use their lowest-cost source of equity to fund the equity portion of new investment, and that for most suppliers retained earnings will be sufficient to meet these needs. We also consider that the reasons stated above in paragraphs 6.167.1 to 6.167.3 still hold.
- 6.169 To respond to Chorus' submission point, we consider that as set out in 2020 Fibre IM reasons paper, we discussed that the relevant WACC estimate is the market's view of the cost of capital for providing regulated FFLAS, not the costs of capital specific to one regulated provider, or a regulated provider's view of its cost of capital for regulated FFLAS.²³⁹
- 6.170 If the financeability becomes an issue in the future, we have the opportunity to consider this issue at a reset, as we did in DPP4 in 2024.
- 6.171 Therefore, our draft decision is to maintain the current approach of not including an allowance for equity issuance costs.

²³⁵ [Commerce Commission "Input Methodologies \(Electricity Distribution and Gas Pipeline Services\): Reasons Paper" \(December 2010\)](#), at 462.

²³⁶ [Commerce Commission "Input methodologies review decisions – Topic paper 4: Cost of capital issues" \(20 December 2016\)](#), at 139-140.

²³⁷ [Commerce Commission "Cost of capital topic paper – Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), at 193-197.

²³⁸ [Commerce Commission "Fibre input methodologies: Main final decisions – reasons paper" \(13 October 2020\)](#), at 458.

²³⁹ *Ibid*, at [6.10].

Chapter 7 Other weighted average cost of capital issues

- 7.1 This section sets out our draft decision on the common WACC approach for both Part 6 and Part 4 for issues that do not fit neatly into the cost of debt or the cost of equity, and includes:
- 7.1.1 tax rates;
 - 7.1.2 reasonableness checks;
 - 7.1.3 aligning the methodology of ID and WACC determinations; and
 - 7.1.4 our split of issues under the tranching approach to the IM Review.

Tax rates

- 7.2 The corporate tax rate is the statutory corporate tax rate for businesses entities set by the NZ Government. It enters the cost of capital estimate when estimating a post-tax cost of capital.
- 7.3 The investor tax rate is the average marginal personal tax rate across all investors in the economy. This forms part of the SBL-CAPM equation for cost of equity. This adjustment to the classical CAPM is incorporated to reflect the fact that the New Zealand tax regime permits the use of imputation credits (attached to dividend payments) to offset personal tax obligations and the fact that most investors are exempt from tax on capital gains, while interest income is not.

Draft decision

- 7.4 Our draft decision is to maintain our current approach of using:
- 7.4.1 the statutory corporate tax rates at the time when estimating the WACC (the currently statutory corporate tax rate is 28%); and
 - 7.4.2 an investor tax rate that reflects the maximum prescribed investor tax rate under the Portfolio Investment Entity (PIE) regime at the time when estimating the WACC (which is currently 28%).

Current IM settings

- 7.5 Under the current WACC IM:
- 7.5.1 we link the corporate tax rate to the statutory corporate tax rate. This makes sure the IMs would continue to allow any future changes in tax rates to flow through to the calculation of the WACC; and

- 7.5.2 we use an investor tax rate reflecting the maximum prescribed investor tax rate under the PIE. Under the PIE regime, individuals are able to limit their maximum tax liability on interest earned to the corporate tax rate. We acknowledge that there is a range of statutory tax rates for interest earned by individuals depending on their total taxable income. Using the maximum prescribed PIE rate is a useful proxy for estimating the average marginal investor tax rate. We also noted this parameter has little effect on the final allowed rate of return.

Reasons for our draft decision

- 7.6 The draft decision of linking the corporate tax rate to the statutory corporate tax rate and linking the investor tax rate to the maximum prescribed investor tax rate under the PIE will allow for any future changes in tax rates to flow through to the calculation of the cost of capital on an ongoing basis.
- 7.7 We consider that our draft decision of maintaining the current approach to tax rates is appropriate as it promotes the statutory purposes.
- 7.8 We received no submissions on this topic.

Reasonableness checks

- 7.9 We undertake reasonableness checks on our WACC estimates to test whether the application of IMs will produce commercially realistic estimates of the cost of capital. The reasonableness checks are not stipulated in the IMs.
- 7.10 The reasonableness checks are intended to help identify any potential oddities in our estimates, which would suggest modifications should be made to the cost of capital IMs or the data that we have used.
- 7.11 In our Issues paper, we set out that we will undertake the reasonableness checks for Part 6 in Tranche 2.

Draft decision

- 7.12 Our draft decision is to maintain the reasonableness checks as part of the cross-check on our WACC estimates.
- 7.13 We will update the market parameters when we undertake the reasonableness checks for Part 6 in Tranche 2.

Current IM settings

- 7.14 The reasonableness checks are not part of the cost of capital IM. The purpose of the reasonableness checks is to test whether application of the IMs will produce commercially realistic estimates of the cost of capital. We have undertaken reasonableness checks in 2010, 2016, 2020 and 2023.

- 7.15 We have been using publicly available information on:
- 7.15.1 the current New Zealand returns on government bonds (proxy for the risk-free rate) and corporate bonds;
 - 7.15.2 historic average and expected returns achieved on the New Zealand stock and bond markets;
 - 7.15.3 independent estimates of the post-tax WACC for suppliers of regulated services in New Zealand, including estimates from New Zealand investment banks; and
 - 7.15.4 the WACC estimates from other overseas regulators.
- 7.16 Among these, we consider that New Zealand sourced WACC estimates should be given more weight than overseas estimates. This is because international WACC estimates can be affected by a number of country-specific factors such as differences in tax regimes, monetary conditions, regulatory objectives and regimes (and WACC methodologies). In its judgement on the Part 4 IMs merits appeals, the High Court agreed that “the most helpful comparative material for cross-checking purposes comprises independent assessments of WACC in the New Zealand context”.

Reasons for our draft decision

- 7.17 Our draft decision is to maintain the reasonableness checks as part of our cross checks. We consider that the checks are important to help identify any potential oddities in our estimates, which would suggest modifications should be made to the cost of capital IMs or the data we have used.
- 7.18 We received Chorus’ submission which included a report it commissioned from Incenta.²⁴⁰ The Incenta report suggested removing the reasonableness checks due to the lack of comparison and errors including:²⁴¹
- 7.18.1 the checks rely on the assumptions that the WACC for an infrastructure service should be lower than a “market average” firm, rather than evidence of this fact;
 - 7.18.2 the historical returns to NZ firms from 1900 to the present are of little relevance to the regulatory WACC determinations, since what is relevant to investors today is future expected returns from assets of equivalent risk;

²⁴⁰ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\); and Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\).](#)

²⁴¹ [Incenta Economic Consulting "Issues relating to common WACC elements" – 'submitting in relation to Issues paper \(Tranche 1\) and Draft decision-making framework paper' \(report prepared for Chorus, 24 July 2025\), at 7-9.](#)

- 7.18.3 some assumptions used in reasonableness checks are inconsistent or out of date, for example:
- 7.18.3.1 we have inconsistently used geometric or arithmetic average in different decisions; and
 - 7.18.3.2 we have applied different market leverage ratios in different decisions.
- 7.19 Incenta therefore recommended the reasonableness checks not be applied or that we resolve the issues identified before undertaking reasonableness checks.²⁴²
- 7.20 Chorus agreed with Incenta that the WACC reasonableness checks should either not be applied or should be reviewed before the checks are applied in the future.²⁴³
- 7.21 We disagree with Incenta and Chorus' suggestion to remove the reasonableness checks. In the 2013 IMs merits appeal judgement, the High Court considered the reasonableness checks. Whilst concluding that they are not appealable themselves, the High Court agreed with our conclusions that "those independent estimates support the robustness and reasonableness of its WACC estimates".²⁴⁴ It further considered that the checks provided important context for its consideration of the individual appeals against the Commission's determination in the WACC IMs of WACC parameter values.²⁴⁵
- 7.22 We noted that the High Court agreed with our assessment of the relative "riskiness". The High Court agreed that a reasonable expectation would be for the Commission's WACC estimates of regulated essential services to be below the average risk WACC estimates.²⁴⁶
- 7.23 However, we will update market data where relevant and ensure a consistent approach.²⁴⁷
- 7.24 In Tranche 2, we will use the latest available data to produce the NZ – sourced WACC estimates for Fibre and undertake the reasonableness checks. We will make sure that we consult with stakeholders on that as part of the Tranche 2 process.

²⁴² Ibid, at 9.

²⁴³ [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at [93].

²⁴⁴ *Wellington International Airport Ltd & Ors v Commerce Commission* [2013] NZHC 3289, at [1207]-[1208] and 406.

²⁴⁵ Ibid, at 406.

²⁴⁶ Ibid, at [1220]-[1222].

²⁴⁷ We note that Incenta pointed out that we used arithmetic averages when estimating the TAMRP, while we used a geometric average when calculating the upper bound of WACC. Incenta noted that this results a different NZ historical average return for the upper bound of WACC estimate. We will examine this issue in Tranche 2 and make sure our approach is consistent where possible when we undertake the reasonableness checks in Tranche 2.

Aligning the methodology of price-quality and information disclosure weighted average cost of capital determinations

7.25 In our Fibre IM Review Issues paper, we identified the issue of aligning the methodology between the Price-Quality (PQ) and Information Disclosure (ID) WACC IM settings as being in scope for this review.²⁴⁸

Our draft decision

7.26 Our draft decision is to continue using the same methodology for estimating the WACC for both PQ, and ID WACC determinations.

Current IM settings

7.27 We publish two main types of WACC determinations:²⁴⁹

7.27.1 PQ WACC determination. These estimates are used in setting price-quality paths and determining the appropriate revenue allowances for suppliers who are subject to PQ regulation; and

7.27.2 ID WACC determinations. These estimates are reflected in regulated suppliers' information disclosures as a benchmark level of profitability alongside their actual return on investment.

7.28 The IMs outline the methodology that we must follow when estimating the cost of capital for PQ WACC determinations and ID WACC determinations separately.

7.29 Currently, the methodology specified is the same across both PQ and ID WACC determinations, besides some minor timing differences on the date of estimation and publication of these estimates.

Reasons for our draft decision

7.30 Our draft decision is to continue using the same methodology for estimating the WACC for both PQ, and ID WACC determinations. Our draft decision does not make changes that would undermine this approach, and no stakeholders have suggested a change to the alignment between the methodology for PQ and ID WACC determinations. We do not see a material benefit to amending the ID WACC IMs outside of the changes we are making that would outweigh the regulatory cost and complexity of designing a separate methodology for ID WACC determinations.

²⁴⁸ [Commerce Commission "Fibre Input Methodologies review 2027: Issues paper \(Tranche 1\)" \(10 July 2025\)](#), at [4.9.4].

²⁴⁹ A WACC determination is also required for airports' price-setting events (PSEs). In the case of Auckland International Airport Limited and Christchurch International Airport Limited, the timing of their PSEs results in their ID WACC determinations being appropriate. For Wellington International Airport Limited, we publish a separate PSE WACC determination.

- 7.31 We received relatively few submissions on this topic, and some stakeholders were unsure what we intended to consider. For example:
- 7.31.1 Enable Networks Limited submitted that there was no detail on what we were considering, though they assumed that we would consider the best method to set the WACC for price-quality paths, then consider the implications for information disclosure regulation;²⁵⁰ and
 - 7.31.2 Tuatahi First Fibre Limited submitted that they remain interested in what we were considering in regards to this issue and would await more detail from the Commission.²⁵¹
- 7.32 We can confirm that we were intending to consider whether the ID WACC methodology needed to be updated if the PQ WACC methodology was changed. Our draft decision is that all changes discussed previously in this document will apply to both PQ and ID WACC determinations.

The split of issues under the tranching approach to the Input Methodologies Review

- 7.33 In Fibre IM Open letter, we set out that we will:
- 7.33.1 review the elements of our approach that are common to Fibre and Part 4 in Tranche 1; and
 - 7.33.2 review the elements that are specific to Fibre in Tranche 2.

Draft decision

- 7.34 Our draft decision is to continue with our approach to review common WACC methodology in Tranche 1, and fibre specific parameters in Tranche 2.

Reasons for our draft decision

- 7.35 We consider that our split of issues under the tranching approach is appropriate. Reviewing common WACC methodologies in Tranche 1 not only provides certainty for regulated suppliers/providers but also keeps consistency across Part 6 and Part 4.
- 7.36 Stakeholders were generally supportive of our approach to conduct this Fibre IM Review in two tranches, though some issues were noted.

²⁵⁰ [Enable "Enable submission to the Fibre IM Review issues paper and Draft Fibre IM Framework submission" \(7 August 2025\)](#), at 2.

²⁵¹ [Tuatahi First Fibre "Tuatahi First Fibre submission to the Fibre IM Review issues paper and Draft Fibre IM Framework submission" \(7 August 2025\)](#), at 2.

- 7.37 Chorus submitted that some components of the weighted average cost of capital are likely relevant to Chorus' proposal for PQP3 and should be considered in Tranche 1.²⁵²
- 7.38 Chorus submitted that:²⁵³
- 7.38.1 if we were to make decisions that increased the WACC to better incentivise investment (e.g., applying a higher WACC percentile) but this decision is not made until December 2027, Chorus would not be able to consider the revised WACC as a driver of our proposal for PQP3;
- 7.38.2 conversely, if we were to make decisions after Chorus submitted PQP3 proposal that materially decreased key elements of the WACC (e.g., beta), it may impact its ability and incentive to proceed with the proposed investment package.
- 7.39 Enable Networks Limited submitted that they supported our approach but would like us to confirm that the ex-ante asset stranding allowance would be included in Tranche 2 of the Fibre IM Review.²⁵⁴ Tuatahi First Fibre submitted that they expect this issue to be reviewed in Tranche 2.²⁵⁵
- 7.40 We disagree with Chorus' view that many of the key WACC parameters need to be moved into Tranche 1. We consider that our current split of issues is appropriate.
- 7.41 As set out in our previous reasons paper, we consider that the mid-point WACC is our best, unbiased estimate of the true cost of capital of the businesses we regulate.²⁵⁶ However:
- 7.41.1 our estimate of the WACC is uncertain and we cannot observe whether we have set the WACC too high or too low; and
- 7.41.2 there may be an asymmetry between the costs and benefits of setting the WACC too high versus setting it too low.

²⁵² Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper (Tranche 1)" (7 August 2025), at [23].

²⁵³ [Chorus "Chorus submission on Fibre input methodologies review 2027: Issues Paper \(Tranche 1\)" \(7 August 2025\)](#), at [23.1]-[23.2].

²⁵⁴ [Enable "Enable submission to the Fibre IM Review issues paper and Draft Fibre IM Framework submission" \(7 August 2025\)](#), at 2

²⁵⁵ [Tuatahi First Fibre "Tuatahi First Fibre submission to the Fibre IM Review issues paper and Draft Fibre IM Framework submission" \(7 August 2025\)](#), at 2.

²⁵⁶ [Commerce Commission "Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), at [6.4]-[6.12].

- 7.42 If we set the WACC below the true cost of capital, regulated businesses will be limited in their ability to earn excessive profits, but they may under-invest. If the under-investment goes undetected and is allowed to accumulate over time, it may result in outages. If we set the WACC above the true cost of capital then regulated businesses may over-invest where the cost of such over-investment would outweigh the benefits to consumers, or regulated businesses will not invest but earn above-normal returns at the expense of consumers.
- 7.43 Therefore, we consider that the purpose of a WACC uplift, if we were to adopt one, is to mitigate the risks of under-investment, rather than incentivise additional investment in the network. For example, we provide an uplift to the WACC for EDBs and Transpower, as we consider the cost of systemic under-investment, if we were to set the WACC too low, to be greater than the cost of allowing a WACC that is slightly too high.
- 7.44 Although we recognise that the final WACC allowed will impact the incentives and ability of Chorus to deliver the proposed investment package, we do not consider it necessary to bring forward our review of all other WACC parameters into Tranche 1. We also consider that if we are comfortable that our WACC methodology is sound, it will promote the right level of investment.
- 7.45 As such, our draft decision is to continue our current tranching approach to our split of WACC issues.
- 7.46 In response to Enable Networks and Tuatahi First Fibre's submissions, we consider that as the asset stranding allowance is a Fibre specific parameter, this issue will be considered in Tranche 2.

Chapter 8 Other matters raised

- 8.1 This chapter provides our responses to stakeholder comments views on the cost of capital topics that have not been addressed in the main body of this draft decision paper.
- 8.2 The summary tables below mainly discuss two aspects of the submissions:
- 8.2.1 Table 8.1 sets out our responses to the submission points raised by submitters that are not related to the Tranche 1 (or Tranche 2) issues, therefore cannot be grouped under the current cost of capital IM chapters; and
- 8.2.2 the second part sets out our responses to submitters who referenced submissions made as part of 2023 IM Review processes and discussed the issues that are not covered in above chapters. In Table 8.2 we explain why we do not consider these submissions would likely change our draft decision and our former view in the 2023 Part 4 IM Review.

Table 8.1 Our responses to stakeholder comments views on the WACC topics that have not been addressed elsewhere

Submitter	Submission	Our response
Alignment between Part 6 and Part 4		
NZAA	<p>NZAA submitted that we should be cautious when aligning the methodologies between Part 6 and Part 4. Careful consideration needs to be given when developing the methodologies, including sector specific characteristics, risks and investment profiles.²⁵⁷</p> <p>NZAA would like us to test the economic rationale for alignment in each case and be open to maintain divergence where sectoral context justifies a distinct approach.²⁵⁸</p>	<p>We acknowledge NZAA’s point that careful consideration needs to be given when considering aligning methodologies between Part 6 and Part 4. We consider that in the context of the common WACC methodologies covered in Tranche 1, our broader decision-making framework, as well as the economic principles and analysis we have applied, it is appropriate to apply these common methodologies to all sectors regulated under Part 6 and Part 4.</p> <p>We also consider that sector specific parameters, such as betas, leverage ratio, credit ratings and other Tranche 2 issues will be considered within the context of each different sectors. For example, fibre specific parameters will be reviewed in Tranche 2 and specific parameters that apply in the context of Part 4 will be reviewed in any subsequent Part 4 IM reviews.</p>

²⁵⁷ [NZ Airports Association “Submission on Fibre Input Methodologies Review issues paper” \(7 August 2025\)](#), at [9]-[10].

²⁵⁸ *Ibid*, at [11].

Table 8.2 Our response to other submissions (resubmitted as part of this process)

Submitter	Submission	Our response
Risk-free rate for cost of equity – Convenience yield		
Oxera for Big 6 EDBs and Oxera for GPBs	Oxera on behalf of EDBs and GPBs argued that our risk-free rate should include a convenience yield as NZ Government bonds have characteristics that lower their yield below a ‘true’ risk-free rate. ^{259,260,261}	We have explained in our 2023 Part 4 IM Review final decision that we disagreed with Oxera’s proposal on the “convenience yield”. ²⁶² We consider that our considerations in 2023 still hold in the current context, including that we are not aware of any practitioners in New Zealand that use bonds other than NZ Government bonds; it would not always be possible to find sufficient liquid corporate bonds with the required credit rating to use to estimate the risk-free rate; and academic articles cited by Oxera do not offer support for what Oxera is proposing.

²⁵⁹ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\), section 2B.](#)

²⁶⁰ [Oxera "Review of the NZCC's WACC-setting methodology" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the for the Part 4 Input Methodologies Review 2023' \(report prepared for the 'Big Six' electricity distribution businesses, 31 January 2023\), section 2.3.](#)

²⁶¹ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital relating to the gas sector" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Firstgas, Powerco and Vector, 19 July 2023\), section 2.5.](#)

²⁶² [Commerce Commission “Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision” \(13 December 2023\), chapter 4.](#)

Submitter	Submission	Our response
Equity issuance costs		
CEG for ENA; ENA; Oxera for Big 6 EDBs; and Oxera for GPBs	<p>CEG on behalf of ENA, ENA, and Oxera for Big 6 EDBs and GPBs argued that retained earnings may not always be sufficient so it is important to include an allowance for equity issuance costs.^{263, 264, 265, 266, 267, 268}</p> <p>CEG on behalf of ENA and ENA submitted that we should include a model for estimating the equity issuance costs.^{269,270}</p> <p>Oxera for Big 6 EDBs also raised the link between the financeability test and equity issuance costs and the possibility of assessing the need for an equity issuance allowance at resets.²⁷¹</p>	<p>Our view is that our considerations in 2023 Part 4 IM Review final reasons paper still hold in the current context.²⁷² This includes that we consider regulated suppliers should use their lowest-cost source of equity to fund the equity portion of new investment and that for most suppliers retained earnings will be sufficient to meet these needs. However, we recognise that equity issuance costs are a legitimate business expense and may revisit this issue at a reset.</p>

²⁶³ [Competition Economists Group "Estimating the WACC under the IMs" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the Part 4 Input Methodologies Review 2023' \(report prepared for Electricity Networks Association, February 2023\)](#), section 6.

²⁶⁴ [Competition Economists Group "Response to 2023 IM draft decision on cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Electricity Networks Aotearoa, July 2023\)](#), section 7.

²⁶⁵ [Electricity Networks Association "Submission on rate of return issues" \(3 February 2023\)](#), section 7.

²⁶⁶ [Electricity Networks Aotearoa "ENA submission on the Input Methodologies review draft decision" \(19 July 2023\)](#), section 4.5.

²⁶⁷ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\)](#), section 8B.

²⁶⁸ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital relating to the gas sector" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Firstgas, Powerco and Vector, 19 July 2023\)](#), section 2A.6.

²⁶⁹ [Competition Economists Group "Response to 2023 IM draft decision on cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Electricity Networks Aotearoa, July 2023\)](#), section 7.

²⁷⁰ [Electricity Networks Aotearoa "ENA submission on the Input Methodologies review draft decision" \(19 July 2023\)](#), section 4.5.

²⁷¹ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\)](#), section 8B.

²⁷² [Commerce Commission "Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), chapter 4.

Financeability assessment

Oxera for Big 6 EDBs; Oxera for GPBs; and ENA submission	Oxera on behalf of EDBs/GPBs recommended we adopt a financeability assessment as AER and Ofgem do. ^{273,274,275} ENA also recommended we should incorporate financeability tests as a cross-check in the context of electrification and decarbonization which may put pressure on EDBs' cash-flows. ²⁷⁶	We have concluded in 2023 Part 4 IM Review that our decision is not to include a financeability test in the IMs, but we may consider this issue at a reset. ²⁷⁷
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TAMRP

Oxera for Big 6 EDBs	Oxera on behalf of EDBs recommended that we continue to use arithmetic rather than geometric averages in our TAMRP methodology. ²⁷⁸	We intend to continue using the arithmetic mean when calculating historical averages in our TAMRP methodology.
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Amortisation of debt issuance costs

CEG for ENA	CEG argued that we undercompensated suppliers for debt issuance costs for initial costs of establishing the debt book and NPV adjustment is needed for a growing RAB. ²⁷⁹	We responded to this point in 2023 Part 4 IM Review and we continue to think that our allowance for debt issuance and associated costs provide adequate overall compensation. Our reasons were outlined in Chapter 3 of the 2023 Cost of capital final reasons paper. ²⁸⁰
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²⁷³ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\)](#), section 8A.

²⁷⁴ [Oxera "Review of the NZCC's WACC-setting methodology" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the for the Part 4 Input Methodologies Review 2023' \(report prepared for the 'Big Six' electricity distribution businesses, 31 January 2023\)](#), section 7.

²⁷⁵ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital relating to the gas sector" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Firstgas, Powerco and Vector, 19 July 2023\)](#), section 2A.6.

²⁷⁶ [Electricity Networks Association "Submission on rate of return issues" \(3 February 2023\)](#), section 7.

²⁷⁷ [Commerce Commission "Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), at [4.453].

²⁷⁸ [Oxera "Review of the NZCC's WACC-setting methodology" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the for the Part 4 Input Methodologies Review 2023' \(report prepared for the 'Big Six' electricity distribution businesses, 31 January 2023\)](#), section 3.

²⁷⁹ [Competition Economists Group "Response to 2023 IM draft decision on cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Electricity Networks Aotearoa, July 2023\)](#), section 4.

²⁸⁰ [Commerce Commission "Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\)](#), chapter 3.

TCS D

Oxera for Big 6 EDBs; CEG for ENA, ENA submissions	Oxera, CEG and ENA set out a few recommendations on TCS D calculations, including the sample selection, outliers removal, and weighting approach. ^{281,282,283,284,285}	The calculation for the spread premium and the TCS D allowance will be updated for Fibre in Tranche 2.
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Reasonableness checks

Oxera for Big 6 EDBs; Oxera for GPBs;	Oxera for EDBs and GPBs made several points on the reasonableness checks including the reliability of RAB multiples and a potential alternative ARP-DRP analysis as a cross-check. ^{286,287}	We have explained in our 2023 Part 4 IM Review final decision that our final decision was not to adopt an ARP-DRP analysis for cross checks. We continue to think the reasons in 2023 Cost of capital final reasons paper still hold in the current context. ²⁸⁸ We will undertake a reasonableness check for Fibre in Tranche 2.
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²⁸¹ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\), section 3B.](#)

²⁸² [Competition Economists Group "Estimating the WACC under the IMs" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the Part 4 Input Methodologies Review 2023' \(report prepared for Electricity Networks Association, February 2023\), section 3.](#)

²⁸³ [Competition Economists Group "Response to 2023 IM draft decision on cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Electricity Networks Aotearoa, July 2023\), section 3.](#)

²⁸⁴ [Electricity Networks Association "Submission on rate of return issues" \(3 February 2023\), section 6.](#)

²⁸⁵ [Electricity Networks Aotearoa "ENA submission on the Input Methodologies review draft decision" \(19 July 2023\), section 4.4.](#)

²⁸⁶ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\), section 7.](#)

²⁸⁷ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital relating to the gas sector" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Firstgas, Powerco and Vector, 19 July 2023\), section 2A.5.](#)

²⁸⁸ [Commerce Commission "Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\), Chapter 7.](#)

WACC percentile

CEG for ENA; ENA; Oxera for Big 6 EDBs; Oxera for GPBs	Oxera on behalf EDBs and GPBs and CEG on behalf of ENA submitted on the WACC percentile for energy businesses. ^{289,290,291,292,293}	We consider that the WACC percentile is a Tranche 2 topic and we will only consider the WACC percentile for Fibre in Tranche 2.
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Leverage

Oxera for Big 6 EDBs; ENA	Oxera on behalf of EDBs and ENA submitted several points on leverage including the comparator sample and length of time used in the estimation. ^{294,295}	We consider that leverage ratio is a Tranche 2 topic, and we will only consider re-estimating the leverage ratio for Fibre in Tranche 2.
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²⁸⁹ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\), section 6.](#)

²⁹⁰ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital relating to the gas sector" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Firstgas, Powerco and Vector, 19 July 2023\), section 3.](#)

²⁹¹ [Competition Economists Group "Response to 2023 IM draft decision on cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Electricity Networks Aotearoa, July 2023\), section 5.](#)

²⁹² [Electricity Networks Association "Submission on rate of return issues" \(3 February 2023\), section 3.](#)

²⁹³ [Electricity Networks Aotearoa "ENA submission on the Input Methodologies review draft decision" \(19 July 2023\), section 4.1.](#)

²⁹⁴ [Electricity Networks Association "Submission on rate of return issues" \(3 February 2023\), section 4.](#)

²⁹⁵ [Oxera "Review of the NZCC's WACC-setting methodology" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the for the Part 4 Input Methodologies Review 2023' \(report prepared for the 'Big Six' electricity distribution businesses, 31 January 2023\), section 6.1.](#)

Debt premium

Oxera for Big 6 EDBs; Oxera for GPBs	Oxera on behalf of EDBs and GPBs submitted that our previous rationale understated the benefits of annually updating the debt premium, and bringing previous analysis into line with their assumptions increased the need for an annual update to the debt premium. They also submitted that there should be an uplift to the debt premium for GPBs. ^{296,297}	We considered this criticism of previous reasoning between the draft and final decision throughout the 2023 IM Review, and considered that even after addressing these points, the benefits of annual updates to the debt premium did not warrant the extra administrative effort involved. We have not received any further information that would cause us to change our view. Furthermore, we continue to think the reasons in 2023 Cost of capital final reasons paper for not adopting an uplift to the debt premium for gas still hold in the current context. ²⁹⁸
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Our treatment of inflation

CEG for Vector	CEG on behalf of Vector submitted that there were several issues with our approach to inflation such as the timing of compensation for inflation, and the mismatch between actual debt costs and the associated revenues stemming from our approach to compensating for the difference between forecast and actual inflation, and how this cannot be addressed by issuing inflation-indexed debt. ²⁹⁹	We considered this issue in depth throughout the 2023 IM Review and were comfortable with our approach. We have not received any further submissions that would cause us to change our views on this matter.
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Other tools to incentivise investment

Oxera for GPBs	Oxera on behalf of GPBs submitted that there were a range of other tools outside of the WACC that can be used to address the asymmetry of risks from under- and over-investment. ³⁰⁰	We note that these tools are outside the scope of the review of common WACC parameters for Tranche 1 of this review.
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²⁹⁶ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for the 'Big Six' electricity distribution businesses, 19 July 2023\), section 3.](#)

²⁹⁷ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital relating to the gas sector" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Firstgas, Powerco and Vector, 19 July 2023\), section 2C.](#)

²⁹⁸ [Commerce Commission "Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Final decision" \(13 December 2023\), Chapter 3.](#)

²⁹⁹ [Competition Economists Group "CPI indexed debt: a panacea for EDBs?" - 'submitting in relation to emerging views phase: Expert report on cost of capital for the Part 4 Input Methodologies Review 2023' \(report prepared for Vector, February 2023\).](#)

³⁰⁰ [Oxera "Response to the New Zealand Commerce Commission's draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital relating to the gas sector" - 'submitting in relation to Part 4 IM Review 2023 draft decisions' \(report prepared for Firstgas, Powerco and Vector, 19 July 2023\), section 4.](#)

Attachment A: Glossary

Table of terms and abbreviations

Act	Telecommunications Act 2001
Commerce Act	the Commerce Act 1986
CAPM	Capital asset pricing model
DGM	Dividend growth model
DPP2	Default price-quality path for the second regulatory period (1 October 2017 – 30 September 2022)
DPP3	Default price-quality path for the third regulatory period (1 October 2022 to 30 September 2026)
DPP4	DPP4 Default price-quality path for the fourth regulatory period (the regulatory period commencing 1 October 2026)
EDB	Electricity distribution business
Fibre IMs	Fibre Input Methodologies
Fibre IM Review	Review of the Fibre input methodologies 2027
FFLAS	Fibre fixed line access service
GFD	Global financial database
ID	Information disclosure
IM	Input methodologies
MRP	Market risk premium
NOI	Notice of intention
NPV	Net present value
NZD	New Zealand dollars
NZX	New Zealand Exchange
Part 4	Part 4 of the Commerce Act
Part 6	Part 6 of the Telecommunications Act
PQ	Price-Quality
PQP	Price-Quality-Path
PQP3	Price-quality path for the regulatory period commencing 1 January 2029
PSE	Price setting event
PV	Present Value
Q2	Second quarter of the calendar year
RCP4	Regulatory Control Period #4, Transpower
RORI	Rate of Return Instrument
Sapere	Sapere Research Group
SBL-CAPM	Simplified Brennan-Lally capital asset pricing model
TACD	Trailing average cost of debt
TCSD	Term credit spread differential
TMR	Total market return
WACC	Weighted average cost of capital