

Cost of capital determination for disclosure year 2024 for information disclosure regulation

For Tuatahi First Fibre Limited and Northpower Fibre Limited

[2023] NZCC 9

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Associated documents

| Publication date | Reference | Title |
|------------------|------------------------|---|
| 1 February 2023 | ISSN 1178-2560 | Cost of capital determination disclosure year 2023 for information disclosure regulation, For Chorus Limited |
| 17 January 2023 | ISBN 978-1-869457-90-7 | Guidelines for WACC determinations under the cost of capital input methodologies - Regulation under Part 4 of the Commerce Act 1986 and Part 6 of the Telecommunications Act 2001 |
| 3 May 2022 | ISSN 1178-2560 | Cost of capital determination for Tuatahi First Fibre Limited and Northpower Fibre Limited ID |
| 1 February 2022 | ISSN 1178-2560 | Cost of capital determination for Chorus, Enable, Tuatahi, and Northpower Fibre ID |
| 30 November 2021 | ISSN 1178-2560 | Fibre Information Disclosure Determination 2021 |
| 1 July 2021 | ISSN 1178-2560 | Cost of capital determination for Chorus' price quality path for PQP1 |
| 13 October 2020 | ISSN 1178-2560 | Fibre Input Methodologies Determination 2020 (consolidated December 2021) |

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WACC estimates for disclosure year 2024 for Tuatahi and Northpower Fibre

1. This cost of capital determination has been made under the Cost of Capital Input Methodologies (IMs).¹
2. This determination specifies the weighted average cost of capital (WACC) estimates that will apply for information disclosure (ID) regulation for disclosure year 2024 for Tuatahi First Fibre Limited (**Tuatahi**) and Northpower Fibre Limited (**Northpower Fibre**).
3. The timing of our WACC determinations for Fibre ID regulation differs depending on the disclosure year of the regulated companies.² We determine an ID WACC for Tuatahi and Northpower Fibre in April each year as their disclosure year is 1 April to 31 March, with disclosure year 2024 being the year ending 31 March 2024.³ We determine an ID WACC for Chorus Limited in January, as its disclosure year is 1 January to 31 December. We determine an ID WACC for Enable Networks Limited in July each year as its disclosure year is 1 July to 30 June.
4. The vanilla and post-tax WACC estimates for disclosure year 2024 for Tuatahi and Northpower Fibre are summarised in Table 1 below.

Table 1: Vanilla and post-tax WACC estimates

| | Mid-point |
|----------------|-----------|
| Vanilla WACC | 7.90% |
| Post-tax WACC | 7.38% |
| Standard error | 0.0131 |

5. The WACC estimates have been calculated as at 1 April 2023, which is the first day of disclosure year 2024 for Tuatahi and Northpower Fibre.
6. This determination should be read in conjunction with our guidelines for estimating the WACC under the IMs.⁴ These guidelines form part of this determination. The guidelines explain our methodology for calculating WACC estimates, including:
 - 6.1 the formulas used;

¹ Fibre Input Methodologies Determination 2020, [2020] NZCC 21 (as amended). An unofficial consolidated version incorporating amendments to the determination is [available on the Commerce Commission website](#).

² Fibre Input Methodologies Determination 2020 (consolidated December 2021).

³ The input methodologies require us to make the determinations within one month of the start of the disclosure year for all disclosure years except for disclosure year 2022.

⁴ Commerce Commission, [Guidelines for WACC determinations under the cost of capital input methodologies](#), 17 January 2023.

- 6.2 the values for WACC parameters which are fixed under the IMs; and
 6.3 our methodology for determining the risk-free rate and average debt premium.

Further details regarding the WACC estimates

WACC parameter values for Tuatahi and Northpower Fibre

7. The parameter values used to generate the mid-point WACC estimates for Tuatahi and Northpower Fibre are summarised in Table 2 below.⁵

Table 2: Values used to calculate WACC estimates

| Parameter | Estimate |
|--|--------------|
| Risk-free rate | 4.54% |
| Average debt premium ⁶ | 1.50% |
| Leverage | 29% |
| Asset beta | 0.50 |
| Equity beta | 0.70 |
| Tax adjusted market risk premium | 7.5% |
| Average corporate tax rate | 28% |
| Average investor tax rate | 28% |
| Debt issuance costs | 0.33% |
| Cost of debt | 6.37% |
| Cost of equity | 8.52% |
| Standard error of midpoint WACC estimate | 0.0131 |
| Mid-point vanilla WACC | 7.90% |
| Mid-point post-tax WACC | 7.38% |

*The numbers are rounded to two decimal points.

⁵ All parameter values except the estimate of the risk-free rate and the average debt premium are set in the Fibre IMs.

⁶ S&P target credit rating BBB.

Risk-free rate

8. The risk-free rate reflects the estimated bid yield to maturity on New Zealand government bonds with a term to maturity equal to the length of the regulatory period (three years).⁷
9. Our estimate of the three-year risk-free rate is based on data reported by Bloomberg for the three-month period ending March 2023 in respect of the April 2025 and May 2026 maturity bonds.
10. The daily data reported by Bloomberg is linearly interpolated, annualised (to reflect the six-monthly or quarterly payment of interest) and averaged to produce the estimate of a 4.54% interest rate on New Zealand government bonds with a three-year term to maturity, as estimated at 1 April 2023.⁸

Average debt premium

11. The average debt premium of 1.50% is the historical five-year average of the debt premium values for the current debt premium reference year (DPRY) and the four previous DPRYs, as shown in Table 3 below. This is the same as the average debt premium input used in our WACC determination published in February 2023.⁹

Table 3: Average debt premium for Tuatahi and Northpower Fibre (%)

| | DPRY 2019 | DPRY 2020 | DPRY 2021 | DPRY 2022 | DPRY 2023 | Average |
|-----------------|--------------|--------------|--------------|--------------|--------------|---------|
| Debt premium | 1.65 | 1.70 | 1.70 | 1.30 | 1.15 | 1.50 |

12. The DPRYs for all fibre regulated entities start on 1 September and end on 31 August.¹⁰ DPRY 2023 (the DPRY ending 31 August 2023), is the current DPRY for Tuatahi and Northpower Fibre as it contains the start of disclosure year 2024 (1 April

⁷ The Fibre IMs define a regulatory period as “the relevant regulatory period for price-quality regulation applicable to a regulated provider as notified in a PQ determination”. The current regulatory period for Chorus under its PQ determination is three years which applies to all of the fibre regulated entities for purposes of determining the ID WACCs. We interpolate between the two closest bonds surrounding a three-year remaining term. This requires taking the yields of the bonds with a remaining term immediately before and after with a three-year term to maturity on that day. The term to maturity is constant but the bonds’ remaining terms to maturity decrease over time so the bonds immediately before and after the target term may change over time.

⁸ Note that the target term to maturity for the risk-free rate and debt premium are different for the first regulatory period (the risk-free rate has a term equal to the length of the regulatory period, ie, three years for the first regulatory period, and the debt premium has a five-year term). For more information see the cost of debt section of the Fibre IM final reasons paper: Commerce Commission “Fibre input methodologies: Main final decisions – Reasons paper”, 13 October 2020, paras 6.81 to 6.264.

⁹ Commerce Commission, Cost of capital determination disclosure year 2023 for information disclosure regulation, For Chorus Limited [2023] NZCC 1, 1 February 2023.

¹⁰ Commerce Commission, Fibre Input Methodologies Determination 2020 (consolidated December 2021).

2023). The Fibre IMs state that the calculation of the debt premium for a DPRY is estimated for each business day in the 12 months preceding the start of the DPRY. This means that for all the DPRYs we have used bond data starting on 1 September and ending on 31 August.

13. We estimated the debt premiums for DPRYs 2019 to 2023 in previous WACC determinations. The debt premium values for DPRYs 2019 to 2021 were estimated in the WACC determination for Chorus PQP1 price path in July 2021. The debt premium value for DPRY 2022 was estimated in the ID WACC determination published on 1 February 2022 applying to Chorus Limited, Enable Limited, Tuatahi and Northpower Fibre.¹¹ The debt premium value for DPRY 2023 was estimated in the ID WACC determination published on 1 February 2023 applying to Chorus Limited.¹²
14. When determining the WACC estimates for Chorus' first price-quality path, we retrospectively estimated the historical debt premium estimates to calculate the five-year historical average. A summary of the data used and how we have applied our judgement in determining the debt premiums for DPRYs 2019 to DPRY 2021 are described in the Cost of capital determination for Chorus' price quality path for PQP1.¹³

Changes in the risk-free rate and debt premium over time

15. The risk-free rate and the debt premium on bonds change over time. Changes in the risk-free rate and debt premium estimates are illustrated below. Figure 1 shows, as at 1 April 2023, changes over time in the:
 - 15.1 five-year risk-free rate from our historical determinations in other regulated sectors;
 - 15.2 three-year risk-free rate; and
 - 15.3 debt premiums and five-year average debt premiums on bonds rated BBB with a term of five years from our historical debt premium determinations.

¹¹ Commerce Commission, Cost of capital determination for Chorus' price quality path for PQP1, NZCC 8 [2021], 1 July 2021 and Commerce Commission, Cost of capital determination for Chorus, Enable, Tuatahi, and Northpower Fibre ID [2022] NZCC 1, 1 February 2022.

¹² Commerce Commission, Cost of capital determination disclosure year 2023 for information disclosure regulation, For Chorus Limited [2023] NZCC 1, 1 February 2023.

¹³ Commerce Commission, Cost of capital determination for Chorus' price quality path for PQP1, NZCC 8 [2021], 1 July 2021, paras 14-18.

Figure 1: Changes in the five-year debt premiums and three-year risk-free rate over time

