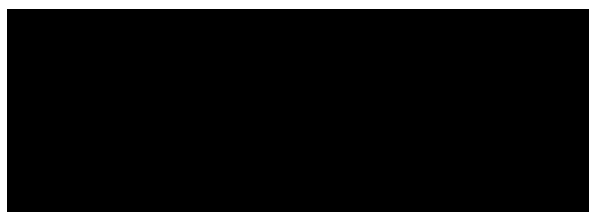


## **Cost of capital determination for disclosure year 2025 for information disclosure regulation**

**For Chorus Limited**

**[2025] NZCC 2**

**The Commission:** Tristan Gilbertson  
Vhari McWha  
Nathan Strong



Tristan Gilbertson, Commissioner

Dated at Wellington 3rd February 2025

COMMERCE COMMISSION

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## Associated documents

Publication date	Reference	Title
1 August 2024	ISSN 1178-2560	Cost of capital determination for disclosure year 2025 for information disclosure regulation- For Enable Networks Limited [2024] NZCC16
1 July 2024	ISSN 1178-2560	Cost of capital determination for Chorus' price quality path for PQP2 [2024] NZCC12
27 June 2024	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 2021 (Pre-IM review version)
28 May 2024	ISSN 1178-2560	Fibre Input Methodologies (tax-adjusted market risk premium) Amendment Determination 2024 [2024] NZCC11
1 May 2024	ISSN 1178-2560	Cost of capital determination for disclosure year 2025 for information disclosure regulation - For Tuatahi Fibre Limited and Northpower Fibre Limited [2024] NZCC 8
7 February 2024	ISSN 1178-2560	Cost of capital determination for disclosure year 2024 for information disclosure regulation – For Chorus Limited [2024] NZCC 1
1 August 2023	ISSN 1178-2560	Cost of capital determination for disclosure year 2024 for information disclosure regulation – For Enable Networks Limited [2023] NZCC 19
28 June 2023	ISSN 1178-2560	Fibre Input Methodologies Amendment Determination 2023 [2023] NZCC 13
1 May 2023	ISSN 1178-2560	Cost of capital determination for disclosure year 2024 for information disclosure regulation, For Tuatahi First Fibre Limited and Northpower Fibre Limited [2023] NZCC 9
1 February 2023	ISSN 1178-2560	Cost of capital determination disclosure year 2023 for information disclosure regulation, For Chorus Limited [2023] NZCC 1
2 August 2022	ISSN 1178-2560	Cost of capital determination disclosure year 2023 for information disclosure regulation, For Enable Networks Limited [2022] NZCC 29

3 May 2022	ISSN 1178-2560	Cost of capital determination for Tuatahi First Fibre Limited and Northpower Fibre Limited ID [2022] NZCC 13
1 February 2022	ISSN 1178-2560	Cost of capital determination for Chorus, Enable, Tuatahi, and Northpower Fibre ID [2022] NZCC 1
30 November 2021	ISSN 1178-2560	Fibre Information Disclosure Determination 2021, as amended
1 July 2021	ISSN 1178-2560	Cost of capital determination for Chorus' price quality path for PQP1 [2021] NZCC 8
13 October 2020	ISSN 1178-2560	Fibre Input Methodologies Determination 2020 [2020] NZCC 21, as amended

Commerce Commission  
Wellington, New Zealand

## WACC estimates for disclosure year 2025 for Chorus Limited

1. This cost of capital determination has been made under the Cost of Capital Input Methodologies (IMs).<sup>1</sup>
2. This determination specifies the weighted average cost of capital (WACC) estimates that will apply for information disclosure (ID) regulation for disclosure year 2025 for Chorus Limited (Chorus).
3. The timing of our WACC determinations for Fibre ID regulation differs depending on the disclosure year of the regulated companies.<sup>2</sup> We determine an ID WACC for Chorus in January or February each year as its disclosure year is 1 January to 31 December, with disclosure year 2025 being the year ending 31 December 2025.<sup>3,4</sup>
4. The vanilla and post-tax WACC estimates for disclosure year 2025 for Chorus are summarised in Table 1 below.

**Table 1: Vanilla and post-tax WACC estimates**

	Mid-point
Vanilla WACC	7.36%
Post-tax WACC	6.91%
Standard error	0.0131

5. The WACC estimates have been calculated as at 1 January 2025, which is the first day of disclosure year 2025 for Chorus.
6. This determination applies the IMs as they applied before the Fibre Input Methodologies (tax-adjusted market risk premium) Amendment Determination

<sup>1</sup> Commerce Commission, Fibre Input Methodologies Determination 2020 [2020] NZCC 21 (as amended). An unofficial consolidated version incorporating amendments to the determination as of 21 December 2021 is [available on the Commerce Commission website](#).

<sup>2</sup> Commerce Commission, Fibre Input Methodologies Determination 2020 [2020] NZCC 21 (as amended).

<sup>3</sup> The Input Methodologies require us to make the determinations for all regulated fibre service providers other than Chorus within one month of the start of the disclosure year for all disclosure years except for disclosure year 2022.

<sup>4</sup> We determine an ID WACC for Tuatahi First Fibre Limited (Tuatahi) and Northpower Fibre Limited (Northpower Fibre) in April each year as their disclosure years are 1 April to 31 March. We determine an ID WACC for Enable Networks Limited in July, as its disclosure year is 1 July to 30 June.

2024 [2024] NZCC11.<sup>5</sup> This is because those amendments to the IM determination do not apply for ID until 3 March 2025.<sup>6</sup>

7. The IMs set out the methodology for determining an estimate of WACC, including:
  - 7.1 the formulas used;
  - 7.2 the values for WACC parameters which are fixed under the IMs; and
  - 7.3 our methodology for determining the risk-free rate and average debt premium.

## Further details regarding the WACC estimates

### WACC parameter values for Chorus

8. The parameter values used to generate the mid-point WACC estimates for Chorus are summarised in Table 2 below.<sup>7</sup>

**Table 2: Values used to calculate WACC estimates\***

Parameter	Estimate
Risk-free rate	3.96%
Average debt premium	1.33%
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	0.25%
Cost of debt	5.54%
Cost of equity	8.10%

<sup>5</sup> See Commerce Commission, [Fibre Input Methodologies Determination 2020](#) [2020] NZCC 21 (consolidated 6 March 2024) and Commerce Commission, [Guidelines for WACC determinations under the cost of capital input methodologies \(pre-IM review version\)](#) (27 June 2024).

<sup>6</sup> See Commerce Commission, [Fibre Input Methodologies \(tax-adjusted market risk premium\) Amendment Determination 2024](#) [2024] NZCC 11 (28 May 2024), clause 3.2.1.

<sup>7</sup> All parameter values except the asset beta, estimate of the risk-free rate and the average debt premium are specified in the Fibre IMs. It should be noted, however, that the equity beta is calculated using the values of the asset beta and leverage, so this value of the asset beta is implicitly defined in the Fibre IMs. See Commerce Commission, [Fibre input methodologies: Main final decisions – reasons paper](#) (13 October 2020), para 6.411.

Standard error of midpoint WACC estimate	0.0131
<b>Mid-point vanilla WACC</b>	<b>7.36%</b>
<b>Mid-point post-tax WACC</b>	<b>6.91%</b>

\*The numbers are rounded to two decimal points, except tax adjusted market risk premium and standard error of the mid-point WACC estimate

### Risk-free rate

9. 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 (four years).<sup>8</sup>
10. Our estimate of the four-year risk-free rate is based on data reported by Bloomberg for the three-month period ending 31 December 2024 in respect of the May 2028 and April 2029 maturity bonds.
11. The daily data reported by Bloomberg is linearly interpolated, annualised (to reflect the six-monthly payment of interest) and averaged to produce the estimate of a 3.96% interest rate on New Zealand government bonds with a four-year term to maturity, as estimated at 1 January 2025.<sup>9</sup>

### Average debt premium

12. The average debt premium of 1.33% is the 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. DPRY 2025 is the current debt premium reference year.

**Table 3: Average debt premium for Chorus (%)**

	<b>DPRY 2021</b>	<b>DPRY 2022</b>	<b>DPRY 2023</b>	<b>DPRY 2024</b>	<b>DPRY 2025</b>	<b>Average</b>
Debt						
premium	1.70	1.30	1.15	1.40	1.10	1.33

<sup>8</sup> We interpolate between the two closest bonds surrounding a four-year remaining term. This requires taking the yields of the bonds with a remaining term immediately before and after a four-year term to maturity on that day. The target 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.

<sup>9</sup> Note that the target term to maturity for the risk-free rate is different than that for the first regulatory period (the risk-free rate has a term equal to the length of the regulatory period, i.e., three years for the first regulatory period, and four years for the second regulatory period). See Commerce Commission, Fibre input methodologies: Main final decisions – Reasons paper (13 October 2020), paras 6.81 to 6.264.

13. The DPRYs for all regulated fibre service providers start on 1 September and end on 31 August.<sup>10</sup> DPRY 2025 (the DPRY ending 31 August 2025), is the current DPRY for Chorus as it contains the start of disclosure year 2025 (1 January 2025). 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.
14. The debt premium values are taken from the following sources:
  - 14.1 The debt premium value for DPRY 2021 was estimated in the WACC determination for Chorus Limited's first PQ path in July 2021.<sup>11</sup> This WACC determination includes our historical debt premium estimates to calculate the five-year historical average, as well as a summary of the data used and how we have applied our judgement in determining the debt premiums for DPRY 2021.
  - 14.2 The debt premium value for DPRY 2022 was estimated in the ID WACC determination published on 1 February 2022 applying to Chorus, Enable, Tuatahi and Northpower Fibre.<sup>12</sup>
  - 14.3 The debt premium value for DPRY 2023 was estimated in the ID WACC determination published on 1 February 2023 applying to Chorus.<sup>13</sup>
  - 14.4 The debt premium value for DPRY 2024 was estimated in the ID WACC determination published on 7 February 2024 applying to Chorus.<sup>14</sup>
15. We have estimated a debt premium of 1.10% for DPRY 2025, based on the data in Table 4 below.
  - 15.1 We have had greatest regard to the category (a) bond, which supports the debt premium of approximately 1.10%. The Chorus bond debt premium estimate (0.96%) matches the target credit rating (BBB). However, the remaining term to maturity is slightly less than five years, so we would expect the five-year debt premium to be slightly higher. Although we have given less regard to category (c) bonds, the Contact Energy (0.88%) bond

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<sup>10</sup> Commerce Commission, Fibre Input Methodologies Determination 2020 [2020] NZCC 21 (as amended), clause 1.1.4.

<sup>11</sup> Commerce Commission, [Cost of capital determination for Chorus' price quality path for PQP1](#), NZCC 8 [2021], 1 July 2021.

<sup>12</sup> Commerce Commission, [Cost of capital determination for Chorus, Enable, Tuatahi, and Northpower Fibre ID](#) [2022] NZCC 1, 1 February 2022.

<sup>13</sup> Commerce Commission, [Cost of capital determination disclosure year 2023 for information disclosure regulation, For Chorus Limited](#) [2023] NZCC 1, 1 February 2023.

<sup>14</sup> Commerce Commission, [Cost of capital determination for disclosure year 2024 for information disclosure regulation, For Chorus Limited](#) [2024] NZCC 1, 7 February 2024.

with a longer term to maturity and the Wellington Airport (1.22%) bond with a shorter term to maturity, are not inconsistent with our debt premium estimate of 1.10%.

15.2 The estimated debt premiums for other issuers in bond categories (e) to (f) are not inconsistent with a debt premium around 1.10%, when consideration is given to the different credit ratings and terms to maturity.

15.3 The Nelson-Siegel-Svensson (NSS) debt premium estimate of 1.10% is consistent with our estimate of 1.10%.

**Table 4: Debt premium estimate for Chorus DPRY 2025**

Bond category	Issuer	Sector	100% Govt owned	Bond credit rating	Remaining term to maturity (years)	Debt premium (%)	Comments
a	Chorus Limited	Fibre	No	BBB	3.70	0.96	5 year debt premium would be higher.
c	Contact Energy Limited	Other	No	BBB	5.10	0.88	5 year debt premium would be lower.
c	Wellington International Airport Limited	Airport	No	BBB	2.40	1.22	5 year debt premium would be higher.
e	Air New Zealand Limited	Other	No	BBB+	4.20	1.53	BBB debt premium would be higher; 5 year debt premium would be higher.
e	Auckland International Airport Limited	Airport	No	A-	4.70	0.82	BBB debt premium would be higher; 5 year debt premium would be higher.
e	Fonterra Co-operative Group Limited	Other	No	A-	1.70	0.70	BBB debt premium would be higher; 5 year debt premium would be higher.
e	Genesis Energy Limited	Other	No	BBB+	4.80	1.25	BBB debt premium would be higher; 5 year debt premium would be higher.
e	Mercury NZ Limited	Other	No	BBB+	4.30	0.91	BBB debt premium would be higher; 5 year debt premium would be higher.
e	Meridian Energy Limited	Other	No	BBB+	4.60	0.90	BBB debt premium would be higher; 5 year debt premium would be higher.
e	Spark Finance Limited	Telco	No	A-	4.60	0.67	BBB debt premium would be higher; 5 year debt premium would be higher.
e	Vector Limited	EDB/GPB	No	BBB+	3.70	0.96	BBB debt premium would be higher; 5 year debt premium would be higher.
f	Christchurch International Airport Limited	Airport	Yes	A-	4.20	0.92	BBB debt premium would be higher; 5 year debt premium would be higher.
f	Transpower New Zealand Limited	EDB/GPB	Yes	AA-	4.00	0.47	BBB debt premium would be higher; 5 year debt premium would be higher.

Notes on bond analysis	
1	CNUNZ 1.98 12/02/2027
2	CENNZ 5.62 04/06/2029
3	WIANZ 2.5 08/14/2026
4	AIRNZ 6.61 04/27/2028
5	AIANZ 5.29 11/17/2028



6	FCGNZ 4.15 11/14/2025
7	GENEPO 3.65 12/20/2028
8	MCYNZ 5.64 06/19/2028
9	MERINZ 5.91 09/20/2028
10	SPKNZ 4.37 09/29/2028
11	VCTNZ 3.69 11/26/2027
12	CHRINT 5.18 05/19/2028
13	TPNZ 5.893 03/15/2028

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

16. 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.
17. Figure 1 shows, as at 1 January 2025, changes over time in the:
- 17.1 five-year risk-free rate from our historical determinations in other regulated sectors;
  - 17.2 four-year risk-free rate as 1st January 2025 is the start of the four-year regulatory period;
  - 17.3 three-year risk-free rate as the first regulatory period for Chorus was three years;
  - 17.4 The estimated debt premium on bonds rated BBB with a remaining term to maturity of five years.

**Figure 1: Changes in the risk-free rates and estimated debt premiums over time**

