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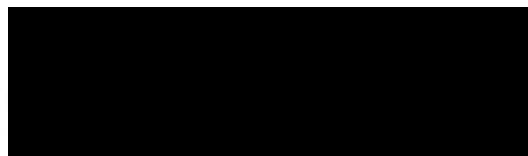
## **Fibre Price-Quality Path Determination 2024**

[2024] NZCC 34

**The Commission:**

Tristan Gilbertson  
Vhari McWha  
Nathan Strong

**Date of determination:** 13 December 2024



Tristan Gilbertson, Telecommunications Commissioner

Dated at Wellington this 13<sup>th</sup> day of December 2024

COMMERCE COMMISSION

Wellington, New Zealand

<b>Determination history</b>		
<b>Determination date</b>	<b>Decision Number</b>	<b>Determination name</b>
16 December 2021	[2021] NZCC 27	Fibre Price-Quality Path Determination 2021
28 February 2023	[2023] NZCC 2	Determination of the duration of the second regulatory period for Fibre Price-Quality Path Determination 2024
13 December 2024	[2024] NZCC 34	Fibre Price-Quality Path Determination 2024

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Under Part 6 of the Telecommunications Act 2001, the Commerce Commission makes the following determination:

1. Title

1.1 This determination is the Fibre Price-Quality Path Determination 2024.

2. Commencement

2.1 This determination comes into force on 1 January 2025.

3. Application

3.1 This determination applies to **Chorus** during the **second regulatory period**.

4. Interpretation

4.1 Unless the context otherwise requires,—

4.1.1 terms in bold type in this determination have the meaning given to those terms in clause 4.2;

4.1.2 terms used in this determination that are defined in the **Act** but not in this determination have the same meanings as in the **Act**; and

4.1.3 terms used in this determination that are defined in the **IM determination** but not in this determination have the same meanings as in the **IM determination**.

4.2 In this determination:

**A**

**access seeker** has the meaning given in s 5 of the **Act**;  
**Act** means the Telecommunications Act 2001;

**availability POI area** means a ‘UFB geographic area’ specified in the table under the heading “Chorus Limited points of interconnection” in the *Notice of points of interconnection under section 231 of the Telecommunications Act 2001* issued by the **Commission** on 27 March 2024 that is served by one or more **POIs**, except that for the purposes of this definition:  
(a) the ‘UFB geographic areas’ specified in rows 8 (Palmerston North and Feilding) and 49 (Whanganui) are treated as one UFB geographic area;

- (b) the 'UFB geographic areas' specified in rows 5, 10, and 15 (Hamilton, Tokoroa, Cambridge, and Te Awamutu) and 31 and 43 (New Plymouth and Hawera) are treated as one UFB geographic area; and
- (c) the 'UFB geographic areas' specified in rows 13 (Timaru) and 34 (Oamaru) are treated as one UFB geographic area;

## **B**

- bps** means bits per second, and is a measure of the speed of network data transmission;
- breach report** means a report on a failure to comply with a quality standard and which contains the content specified in clause 9.5;

## **C**

- central office** means a physical building or cabinet used to house a termination point of a **fibre network**;
- Chorus** has the meaning given in the **IM determination**;
- Commission** has the meaning given in s 5 of the **Act**;
- connection** has the meaning given in paragraph (b) of the definition of "connection" in the **IM determination**;
- core fibre asset** has the meaning given in the **IM determination**;
- CPI** has the meaning given in the **IM determination**;

## **E**

- E-NNI** means an external network-to-network interface in relation to **PQ FFLAS** provided by **Chorus**;
- end-user** has the meaning given in s 5 of the **Act**;

## **F**

<b>fault</b>	<p>(a) has the meaning given in paragraph (b)(i) of the definition of 'fault' in the <b>IM determination</b>; and</p> <p>(b) for the purpose of paragraph (b)(ii) of the definition of 'fault' in the <b>IM determination</b>, means a <b>port utilisation</b> equal to or greater than 95%;</p>
<b>FFLAS</b>	has the same meaning as 'fibre fixed line access service' defined in s 5 of the <b>Act</b> ;
<b>fibre network</b>	has the meaning given in s 5 of the <b>Act</b> ;
<b>force majeure event</b>	<p>means an event or circumstance beyond <b>Chorus's</b> control which makes it impossible or illegal to provide <b>PQ FFLAS</b>, including:</p> <p>(a) fire, floods, storms, earthquake, or other act of God;</p> <p>(b) any act of a public enemy, war, riot, or act of civil or military authority;</p> <p>(c) nuclear, chemical or biological contamination; and</p> <p>(d) any act of a third party (not being an employee, agent or subcontractor of <b>Chorus</b>) engaged in subversive or terrorist activity or sabotage;</p> <p>but does not include an event to the extent that the effect of that event could have been substantially prevented, avoided, overcome or mitigated by:</p> <p>(e) implementation of any contracted business continuity or disaster recovery service, or any contingency plans agreed between <b>Chorus</b> and the <b>Commission</b> or which <b>Chorus</b> has represented it has in place;</p> <p>(f) <b>Chorus</b> exercising a reasonable standard of care; or</p> <p>(g) <b>Chorus</b> using information provided by the <b>Commission</b> or which is available in the public domain;</p>



<b>forecast allowable revenue</b>	has the meaning given in the <b>IM determination</b> and is the amount calculated for each <b>regulatory year</b> in accordance with paragraph (3) of Schedule 2;
<b>forecast building blocks revenue</b>	means the amount calculated in accordance with paragraph (1) of Schedule 1;
<b>forecast total FFLAS revenue</b>	has the meaning given in the <b>IM determination</b> and is the amount calculated for each <b>regulatory year</b> in accordance with paragraph (3) of Schedule 3;
<b>G</b>	
<b>GAAP</b>	has the meaning given in the <b>IM determination</b> ;
<b>GST</b>	has the meaning given in s YA 1 of the Income Tax Act 2007;
<b>I</b>	
<b>IM determination</b>	means the <i>Fibre Input Methodologies Determination 2020</i> [2020] NZCC 21;
<b>inOctets</b>	means the number of <b>octets</b> received by a <b>port</b> ;
<b>input methodology</b>	has the meaning given in s 164(1) of the <b>Act</b> ;
<b>L</b>	
<b>layer 1</b>	has the meaning given in s 155ZS of the <b>Act</b> ;
<b>layer 1 service</b>	has the meaning given in s 155ZS of the <b>Act</b> ;
<b>layer 1 communal asset</b>	means an asset specified in Schedule 5;
<b>layer 2</b>	has the meaning given in s 155ZS of the <b>Act</b> ;
<b>layer 2 service</b>	has the meaning given in s 155ZS of the <b>Act</b> ;
<b>M</b>	
<b>monthly average number of connections</b>	means the sum of the <b>connections</b> on the first day of the calendar month, and the <b>connections</b> on the last day of the calendar month, divided by two;
<b>N</b>	

<b>net unplanned downtime</b>	means <b>reported unplanned downtime</b> minus the length of time an <b>access seeker</b> or <b>end-user</b> experiences an <b>outage</b> to their <b>PQ FFLAS</b> attributable to: <ul style="list-style-type: none"> <li>(a) a <b>force majeure event</b>; or</li> <li>(b) <b>non-diverse transport services</b>;</li> </ul>
<b>non-diverse</b>	means there is no alternate route to the <b>POI</b> available;
<b>O</b>	
<b>octet</b>	means a unit of digital information consisting of eight bits;
<b>OLT</b>	means an optical line terminal used for the provision of <b>PQ FFLAS</b> by <b>Chorus</b> ;
<b>other FFLAS income</b>	means income received by <b>Chorus</b> in respect of <b>PQ FFLAS</b> , excluding income from <b>PQ FFLAS</b> the <b>price(s)</b> of which are related to the quantity supplied;
<b>outage</b>	has the meaning given in the <b>IM determination</b> ;
<b>outage notification</b>	means a notification of an <b>outage</b> to a <b>connection</b> provided to <b>Chorus</b> by an <b>access seeker</b> or <b>end-user</b> that gives <b>Chorus</b> sufficient information to identify the <b>connection</b> ;
<b>outOctets</b>	means the number of <b>octets</b> sent by a <b>port</b> ;
<b>P</b>	
<b>pass-through cost</b>	has the meaning given in the <b>IM determination</b> ;
<b>POI</b>	means a 'specified point of interconnection' listed in the <i>Notice of points of interconnection under section 231 of the Telecommunications Act 2001</i> issued by the <b>Commission</b> on 27 March 2024;
<b>PON port</b>	means the <b>port</b> on an <b>OLT</b> ;

<b>port</b>	means all physical, virtual and sub-interfaces for the exchange of traffic on a <b>fibre network</b> , excluding <b>UNI</b> , <b>E-NNI</b> , and <b>PON ports</b> ;
<b>port utilisation</b>	has the meaning given in the <b>IM determination</b> and is the amount calculated in accordance with paragraph (2) of Schedule 4;
<b>PQ FFLAS</b>	has the meaning given in the <b>IM determination</b> ;
<b>price</b>	means an individual fee or charge, in nominal terms exclusive of <b>GST</b> , for the provision of <b>PQ FFLAS</b> , and <b>priced</b> has a corresponding meaning;
<b>Q</b>	
<b>quantities</b>	means the amount of <b>PQ FFLAS</b> forecast on a demonstrably reasonable basis to be provided, which corresponds to the units in which each tariff, fee, or charge (or individual component of each) is <b>priced</b> ;
<b>R</b>	
<b>regulatory year</b>	has the meaning given in the <b>IM determination</b> ;
<b>reported unplanned downtime</b>	means the length of time that a <b>connection</b> has an <b>outage</b> , but excluding any time before <b>Chorus</b> first receives an <b>outage notification</b> for the <b>outage</b> in respect of that <b>connection</b> ;
<b>RFC 2863</b>	means <i>The Interfaces Group MIB Internet Official Protocol Standard RFC 2863</i> , issued by the IETF Interfaces MIB Working Group in June 2000;
<b>S</b>	
<b>second regulatory period</b>	means the 4-year period beginning 1 January 2025 and ending 31 December 2028;
<b>section 193(2) notice</b>	means the <i>Notice to supply information to the Commerce Commission under section 193(2) of the Telecommunications Act 2001 – Compliance statements for the second</i>

*regulatory period* issued to **Chorus** on 13 December 2024 and published on our website;

## **T**

**total average net unplanned downtime**

means the number of minutes calculated in accordance with the formula in paragraph (1) of Schedule 4;

**transport service**

means a **layer 1**, or managed throughput, fibre service provided over the **fibre network**, to transport voice and data traffic between **central offices**, including **central offices** that are also **POIs**;

## **U**

**UNI**

has the meaning given in paragraph (b) of the definition of “UNI” in the **IM determination**;

## **W**

**working day**

has the meaning given in s 5 of the **Act**.

5. Price-quality path

5.1 **Chorus** must comply with the price-quality path, which consists of—

5.1.1 the price path specified in clause 7; and

5.1.2 the quality standards specified in clause 8.2, 8.5, and 8.9.

6. Applicable input methodologies

6.1 The **input methodologies** that apply to this determination are those specified in Part 3 and clause 2.2.8 of the **IM determination**.

7. Price path

*Maximum revenues that may be recovered by Chorus*

7.1 For the purpose of s 194(2)(b) and s 195 of the **Act** and clause 3.1.1 of the **IM determination**, the maximum revenue that **Chorus** may recover in any **regulatory year** is **forecast allowable revenue** for that **regulatory year**.

*Compliance with the price path*

7.2 To comply with the price path for a **regulatory year**, **Chorus's forecast total FFLAS revenue** in that **regulatory year** must not exceed the **forecast allowable revenue** for that **regulatory year**.

8. Assessments and quality standards

*Annual Layer 1 availability assessment*

8.1 For **Chorus** to comply with the **layer 1** availability assessment for an **availability POI area** for a **regulatory year**, **Chorus's total average net unplanned downtime** must not exceed, for the **layer 1** aspect of a **fibre network**, 57 minutes in that **availability POI area** in the **regulatory year**.

*Layer 1 availability quality standard*

8.2 **Chorus** complies with the **layer 1** availability quality standard for an **availability POI area** for a **regulatory year**, if it complies with the **layer 1** availability assessment for the **availability POI area** for that **regulatory year**.

8.3 However, despite clause 8.2,—

8.3.1 **Chorus** does not fail to comply with the **layer 1** availability quality standard for the **availability POI area** for that **regulatory year** if it complied with the **layer 1** availability assessment for that area for the preceding **regulatory year**; and

- 8.3.2 there is no **layer 1** availability quality standard in the first **regulatory year**.

*Annual Layer 2 availability assessment*

- 8.4 For **Chorus** to comply with the **layer 2** availability assessment for an **availability POI area** for a **regulatory year**, **Chorus's total average net unplanned downtime** must not exceed, for the **layer 2** aspect of a **fibre network**, 19 minutes in that **availability POI area** in the **regulatory year**.

*Layer 2 availability quality standard*

- 8.5 **Chorus** complies with the **layer 2** availability quality standard for an **availability POI area** for a **regulatory year** if it complies with the **layer 2** availability assessment for the **availability POI area** for that **regulatory year**.
- 8.6 However, despite clause 8.5,—
- 8.6.1 **Chorus** does not fail to comply with the **layer 2** availability quality standard for the **availability POI area** for that **regulatory year** if it complied with the **layer 2** availability assessment for that area for the preceding **regulatory year**; and
- 8.6.2 there is no **layer 2** availability quality standard in the first **regulatory year**.

*Monthly performance assessment*

- 8.7 For **Chorus** to comply with the performance assessment for a **port** for a calendar month, the **port** must not experience **port utilisation**, upstream or downstream, equal to or exceeding 90% in any five-minute interval in the calendar month.
- 8.8 For the purposes of the performance assessment under clause 8.7, an instance where **port utilisation** equals or exceeds 90% must be disregarded if it is attributable to a **force majeure event**.

*Performance quality standard*

- 8.9 **Chorus** complies with the performance quality standard for a **port** for a calendar month if it complies with the performance quality assessment for the **port** for that calendar month.
- 8.10 However, despite clause 8.9,—
- 8.10.1 **Chorus** does not fail to comply with the performance quality standard for the **port** for that calendar month if it complied with the performance quality assessment for the **port** for either or both of the 2 preceding calendar months;

8.10.2 if **Chorus** fails to comply with the performance quality standard for the **port** for a calendar month, a failure to comply with the performance quality standard in the following calendar month must be treated as part of a single continuous breach and the same applies in respect of consecutive calendar months (that is, there is a single continuous breach until **Chorus** meets the performance quality assessment for the **port** for a calendar month); and

8.10.3 there is no performance quality standard in the first 2 calendar months of the first **regulatory year**.

9. Reporting requirements

*Compliance reports*

9.1 Chorus must provide to the **Commission** the information specified in clause A6 of Attachment A of the **section 193(2) notice** in relation to **Chorus's** compliance with—

9.1.1 the assessments specified in clauses 8.1 and 8.4 for each **regulatory year** of the **regulatory period**; and

9.1.2 the assessment specified in clause 8.7 for each month of each **regulatory year** of the **regulatory period**.

*Timeframes for providing information required under section 193(2) notice*

9.2 For the purpose of s 194(2)(e) of the **Act**, **Chorus** must provide to the **Commission**—

9.2.1 the information required under clause 9.1 for a **regulatory year** within 5 months of the end of that **regulatory year**; and

9.2.2 the information specified in clause A3 of Attachment A of the **section 193(2) notice**—

(a) in respect of **regulatory year** 2025, no later than 31 May 2025;

(b) in respect of **regulatory years** 2026, 2027, and 2028, no later than 22 November of the preceding **regulatory year**.

*Breach reports for failure to comply with quality standards*

9.3 If **Chorus** fails to comply with a quality standard, **Chorus** must provide to the **Commission** a **breach report**.

9.4 **Chorus** must provide the **breach report**:

9.4.1 in the case of a breach of a quality standard specified in clause 8.2 or 8.5, within 5 months of the end of the **regulatory year** in respect of which the breach occurred; and

9.4.2 in the case of a breach of the quality standard specified in clause 8.9, within 5 months of the end of the calendar month in respect of which the breach first occurred.

9.5 A **breach report** must contain—

9.5.1 an explanation of the reasons for the breach of the relevant quality standard, and supporting evidence for those reasons;

9.5.2 an explanation of the impact of the breach of the relevant quality standard on consumers;

9.5.3 any independent review, investigation, or analysis into why **Chorus** breached the relevant quality standard;

9.5.4 an outline of any intended review, investigation, or analysis into why **Chorus** breached the relevant quality standard, which is planned but not yet completed;

9.5.5 a description of any mitigating factors that may have prevented or minimised a breach of the relevant quality standard; and

9.5.6 a description of any steps the **Chorus** proposes to take to mitigate the risk of a future similar breach of the relevant quality standard.



## Schedule 1: Forecast building blocks revenue

(1) **Chorus's** 'forecast building blocks revenue' for each **regulatory year** is calculated according to the following formulae:

(a) for **regulatory year 2025**—

$$FBBR_{2025} = SBBR \times (1 + \Delta CPI_{2025}) \times (1 + \Delta Q_{2025})$$

(b) for **regulatory year 2026**—

$$FBBR_{2026} = FBBR_{2025} \times (1 + \Delta CPI_{2026}) \times (1 + \Delta Q_{2026})$$

(c) for **regulatory year 2027**—

$$FBBR_{2027} = FBBR_{2026} \times (1 + \Delta CPI_{2027}) \times (1 + \Delta Q_{2027})$$

(d) for **regulatory year 2028**—

$$FBBR_{2028} = FBBR_{2027} \times (1 + \Delta CPI_{2028}) \times (1 + \Delta Q_{2028})$$

(2) For the purposes of paragraph (1)—

*FBBR* is forecast building blocks revenue for the **regulatory year**;

*SBBR* is \$870,228,000, being the nominal smoothed building blocks revenue at the start of **regulatory year 2025**;

$\Delta CPI$  is the change in **CPI** calculated in accordance with paragraph (3); and

$\Delta Q$  is the forecast change in **quantities** between for the **regulatory year** that is listed in Table 1.1 below.

**Table 1.1** Forecast changes in quantities

<b>Regulatory year 2025</b>	0%
<b>Regulatory year 2026</b>	2.56%
<b>Regulatory year 2027</b>	1.96%
<b>Regulatory year 2028</b>	1.72%

- (3) For the purposes of paragraph (2),  $\Delta CPI$  for **regulatory year**  $t$  is calculated in accordance with the following formula—

$$\Delta CPI_t = \frac{CPI_{Mar,t-1} + CPI_{Jun,t-1} + CPI_{Sep,t-1} + CPI_{Dec,t-1}}{CPI_{Mar,t-2} + CPI_{Jun,t-2} + CPI_{Sep,t-2} + CPI_{Dec,t-2}} - 1$$

where—

$CPI_{q,t-n}$  is the **CPI** for the quarter ending in  $q$  in the 12-month period  $n$  years prior to **regulatory year**  $t$ .

- (4) For the purpose of paragraph (3), the calculation for  $\Delta CPI_t$  must use the most recent Reserve Bank Monetary Policy Statement available before 30 June of **regulatory year**  $t-1$ .
- (5) For the purposes of clause 2.2.8(8) of the **IM determination**, the depreciation method applicable to the **second regulatory period** is:
- (e) for **core fibre assets** that are **Layer 1 communal assets**, tilted annuity depreciation with a 0.35% real tilt rate and asset lives consistent with **GAAP**;
  - (f) for all other **core fibre assets**, a depreciation method consistent with **GAAP**; and
  - (g) for the **financial loss asset**, tilted annuity depreciation with a -13% real tilt rate and an asset life equal to the harmonic mean (being 14.2 years) of the asset lives of **core fibre assets**.

## Schedule 2: Calculation of forecast allowable revenue

- (1) **Chorus** must calculate its **forecast allowable revenue**—
  - (a) in respect of **regulatory year** 2025, no later than 31 May 2025; and
  - (b) in respect of **regulatory years** 2026, 2027, and 2028, no later than 22 November of the preceding **regulatory year**.
- (2) When calculating the **forecast allowable revenue** for the purpose of paragraph (1), **Chorus** must prepare and use a demonstrably reasonable forecast of **pass-through costs**.
- (3) The 'forecast allowable revenue' for a **regulatory year** is the amount calculated in accordance with the following formula—

$$FBBR + FPTC + WUA$$

where—

- FBBR* is the **forecast building blocks revenue**;
- FPTC* is the forecast of **pass-through costs** made prior to 30 June of the year prior to that **regulatory year**; and
- WUA* is the wash-up amount, which is—
- (a) \$45,762,000 for **regulatory year** 2025;
  - (b) \$47,882,000 for **regulatory year** 2026;
  - (c) \$49,798,000 for **regulatory year** 2027; and
  - (d) \$51,669,000 for **regulatory year** 2028.

### Schedule 3: Calculation of forecast total FFLAS revenue

- (1) **Chorus** must calculate its **forecast total FFLAS revenue**—
  - (a) in respect of **regulatory year** 2025, no later than 31 May 2025;
  - (b) in respect of **regulatory years** 2026, 2027, and 2028, no later than 22 November of the preceding **regulatory year**.
- (2) When calculating the **forecast total FFLAS revenue** for the purposes of paragraph (1), **Chorus** must prepare and use a demonstrably reasonable forecast of the **quantities** and **other FFLAS income** for the **regulatory year** to which the forecast **prices** for each **regulatory year** will apply.
- (3) The 'forecast total FFLAS revenue' for a **regulatory year** is the amount calculated in accordance with the following formula—

$$\sum_i (P_i - D_i) \times FQ_i + FOFI$$

where—

- |             |   |
|-------------|---|
| <i>i</i>    | is each tariff;                         |
| <i>P</i>    | is the <b>price</b> ;                   |
| <i>D</i>    | is any discount;                        |
| <i>FQ</i>   | is the forecast <b>quantities</b> ; and |
| <i>FOFI</i> | is forecast <b>other FFLAS income</b> . |

## Schedule 4: Calculation of quality standards

### Calculation of average net unplanned downtime

- (1) 'Total average net unplanned downtime' for a **regulatory year** in an **availability POI area** is calculated in accordance with the following formula, rounded to the nearest minute—

$$\sum_{i=1}^{12} \frac{\sum NUD_i}{ANAC_i}$$

where—

*NUD* means **net unplanned downtime** for that calendar month in that **availability POI area**;

*ANAC* means **monthly average number of connections** for that calendar month in that **availability POI area**; and

*i* means the calendar month, where 1 = January, ..., 12 = December.

### Calculation of port utilisation

- (2) 'Port utilisation' is calculated as a percentage figure in accordance with the following formula—

$$\frac{octets \times 8}{5 \times 60 seconds \times PS} \times 100$$

where—

*octets* means the number of **octets** at a **port**, being the greater of the **inOctets** or the **outOctets**, measured over a 5-minute interval in accordance with **RFC 2863**, and includes framing characters, but excludes Ethernet preamble, start frame delimiter, and interpacket gaps; and

*PS* means **port** speed and is measured in **bps**.

## **Schedule 5: Layer 1 communal assets**

A **layer 1 communal asset** is a **core fibre asset** of one of the following types that is used to provide **layer 1 services**:

- (1) Cabinets;
- (2) Ducts;
- (3) Fibre Cables;
- (4) Fibre Service Lead-ins;
- (5) Manholes;
- (6) Optical Fibre Distribution Frames;
- (7) Poles;
- (8) Optical splitters.