

Public version

[Draft] Fibre Price-Quality Path Determination 2021

[2021] NZCC [XX]

The Commission:

Sue Begg
John Crawford
Tristan Gilbertson
Elisabeth Welton

Date of determination:

[Day] [Month] 2021

[Signature]

[Name], Commissioner

Dated at Wellington this [X] day of [Month] 2021

COMMERCE COMMISSION

Wellington, New Zealand

Determination history		
Determination date	Decision Number	Determination name
[Day] [Month] 2021	[2021] NZCC [XX]	Fibre Price-Quality Path Determination 2021

CONTENTS

1.	Title.....	5
2.	Commencement.....	5
3.	Application.....	5
4.	Interpretation.....	5
5.	Price-quality path.....	11
6.	Applicable input methodologies.....	11
7.	Price path.....	11
8.	Quality standards.....	11
9.	Reporting requirements.....	12
	Schedule 1: Forecast building blocks revenue.....	13
	Schedule 2: Calculation of forecast allowable revenue.....	14
	Schedule 3: Calculation of forecast total FFLAS revenue.....	15
	Schedule 4: Calculation of quality standards.....	16

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 2021.

2. Commencement

2.1 This determination comes into force on 1 January 2022.

3. Application

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

4. Interpretation

4.1 In this determination, unless stated otherwise—

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

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

4.1.3 any reference to a period of time is interpreted in accordance with s 35 of the Interpretation Act 1999;

4.1.4 any reference to legislation includes a reference to that legislation as amended, consolidated, or substituted;

4.1.5 any reference to terms from legislation in this determination has the meaning given in the applicable legislation at the time it is applied;

4.1.6 any reference to “includes” means “includes, but is not limited to”; and

4.1.7 a word which denotes the singular also denotes the plural and vice versa.

4.2 In this determination, including in the Schedules, words or phrases in bold type have the following meanings:

A

access seeker

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

Act

means the Telecommunications Act 2001;

average number of connections

means the sum of the **connections** on the first day of the calendar month, and the **connections** on the last day of the calendar month, divided by two;

average unplanned downtime means the number of minutes (rounded to the nearest whole minute) calculated in accordance with the formula in paragraph (1) of Schedule 4;

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 9.4;

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 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

fault

- (a) has the meaning given in paragraph (b)(i) of the definition of 'fault' in the **IM determination**; and
- (b) for the purpose of paragraph (b)(ii) of the definition of 'fault' in the **IM determination**, means a **port utilisation** equal to or greater than 90%;

fibre network has the meaning given in s 5 of the **Act**;

first regulatory period	means the three-year period beginning 1 January 2022 and ending 31 December 2024;
force majeure event	<p>means an event or circumstance beyond Chorus's control which makes it impossible or illegal to provide PQ FFLAS, including:</p> <ul style="list-style-type: none"> (a) fire, floods, storms, earthquake, or other act of God; (b) any act of a public enemy, war, riot, or act of civil or military authority; (c) nuclear, chemical or biological contamination; and (d) any act of a third party (not being an employee, agent or subcontractor of Chorus) engaged in subversive or terrorist activity or sabotage; <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> <ul style="list-style-type: none"> (e) implementation of any contracted business continuity or disaster recovery service, or any contingency plans agreed between Chorus and the Commission or which Chorus has represented it has in place; (f) Chorus exercising a reasonable standard of care; or (g) Chorus using information provided by the Commission or which is available in the public domain;
forecast allowable revenue	has the meaning given in the IM determination and is the amount calculated for each regulatory year in accordance with, and at times required by, paragraph (5) of Schedule 2;
forecast building blocks revenue	means the amount specified in paragraphs (1) and (2) of Schedule 1;
forecast total FFLAS revenue	has the meaning given in the IM determination and is the amount calculated for each regulatory year in accordance with,

and at times required by, paragraph (4) of Schedule 3;

G

GAAP has the meaning given in the **IM determination**;

GST has the meaning given in s YA 1 of the Income Tax Act 2007;

I

IM determination means the *Fibre Input Methodologies Determination 2020* [2020] NZCC 21, including any amendment in effect at the time this determination is made;

inOctets means the number of **octets** received by a **port**;

input methodology has the meaning given in s 164(1) of the **Act**;

L

layer 1 has the meaning given in s 155ZS of the **Act**;

layer 2 has the meaning given in s 155ZS of the **Act**;

N

net unplanned downtime means **unplanned downtime** minus the length of time an **access seeker** or **end-user** experiences a **fault** to their **PQ FFLAS** attributable to—

- (a) a **force majeure event**; or
- (b) **non-diverse transport services**;

non-diverse means there is no alternate route to the **POI** available;

O

octet means a unit of digital information consisting of eight bits;

OLT means an optical line terminal used for the provision of **PQ FFLAS** by **Chorus**;

outOctets means the number of **octets** sent by a **port**;

P

pass-through cost	has the meaning given in the IM determination ;
POI	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 Commission on 19 December 2019;
POI area	means a 'UFB geographic area' listed in the <i>Notice of points of interconnection under section 231 of the Telecommunications Act 2001</i> issued by the Commission on 19 December 2019 that is served by one or more POIs ;
PON port	means the port on an OLT ;
port	means all physical, virtual and sub-interfaces, and excludes UNI , E-NNI , and PON ports , in relation to PQ FFLAS provided by Chorus ;
port utilisation	has the meaning given in the IM determination and is the amount calculated in accordance with paragraph (2) of Schedule 4;
PQ FFLAS	has the meaning given in the IM determination ;
price	means an individual fee or charge, in nominal terms exclusive of GST , for the provision of PQ FFLAS , and priced has a corresponding meaning;

Q

quantities	means the amount of PQ FFLAS 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 priced ;
-------------------	--

R

regulatory year has the meaning given in the **IM determination**;

RFC 2863 means *The Interfaces Group MIB Internet Official Protocol Standard*, issued by the ETF Interfaces MIB Working Group in June 2000;

S

section 193(2) notice means the *Notice to supply information to the Commerce Commission under section 193(2) of the Telecommunications Act 2001 – Compliance statements for the first regulatory period* published on [X];

T

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 the **IM determination**;

unplanned downtime has the meaning given in the **IM determination**;

W

wash-up amount means, for **regulatory years** 2022, 2023, and 2024, nil; and

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.

6. Applicable input methodologies

6.1 The **input methodologies** that apply to this determination are those specified in Part 3 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. Quality standards

Compliance with the availability quality standards

8.1 To comply with the **layer 1** availability quality standard in a **regulatory year**, **Chorus's average unplanned downtime** must not exceed, for a **layer 1** aspect of a **fibre network**, 15 minutes in one or more **POI areas** in one or more calendar months.

8.2 To comply with the **layer 2** availability quality standard for a **regulatory year**, **Chorus's average unplanned downtime** must not exceed, for a **layer 2** aspect of a **fibre network**, 3 minutes in one or more **POI areas** in one or more calendar months.

Compliance with the performance quality standard

8.3 To comply with the performance quality standard for a **regulatory year**, the percentage of **Chorus's ports** experiencing **port utilisation**, upstream or downstream, equal to or exceeding 90% in any five-minute interval in one or more calendar months, must not exceed 0.1%.

9. Reporting requirements

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

- 9.1 For the purpose of s 194(2)(e) of the **Act**, **Chorus** must provide to the **Commission**—
- 9.1.1 the information specified in clause A3 of Attachment A of the **section 193(2) notice**—
- (a) no later than 30 **working days** after the start of each **regulatory year**; and
 - (b) 30 **working days** before any time **Chorus** intends to change its **prices**; and
- 9.1.2 the information specified in clause A5 of Attachment A of the **section 193(2) notice** no later than six months after the end of each **regulatory year** of the **first regulatory period**.

Breach reports for failure to comply with quality standards

- 9.2 If **Chorus** fails to comply with an availability quality standard under clause 8.1 or 8.2, **Chorus** must provide to the **Commission** a **breach report** within 5 months of the end of the **regulatory year**, with information in respect of each **POI area** giving rise to the breach of an availability quality standard.
- 9.3 If **Chorus** fails to comply with the performance quality standard under clause 8.3, **Chorus** must provide to the **Commission** a **breach report** within 5 months of the breach of the quality standard in clause 8.3.
- 9.4 A 'breach report' must contain—
- 9.4.1 the reasons for breaching the relevant quality standard, and supporting evidence for those reasons;
 - 9.4.2 an explanation of the cause of the breach;
 - 9.4.3 any independent review, investigation, or analysis into why **Chorus** breached the relevant quality standard; and
 - 9.4.4 an outline of any intended review, investigation, or analysis into why **Chorus** breached the relevant quality standard, which is planned but not yet completed.

Schedule 1: Forecast building blocks revenue

- (1) **Chorus's** 'forecast building blocks revenue' for **regulatory year** 2022 is \$675,157,258.
- (2) **Chorus's** 'forecast building blocks revenue' for **regulatory year** 2023 and **regulatory year** 2024 is calculated in accordance with the following formula—

$$FBBR_{t-1} \times (1 + \Delta CPI_{t-1} + \Delta Q_t)$$

where—

$FBBR_{t-1}$ is 'forecast building blocks revenue' for the previous **regulatory year**;

ΔCPI_{t-1} is the change in **CPI** calculated in accordance with paragraph (3); and

ΔQ_t is the forecast changes in **quantities** listed in Table 1.1 below.

- (3) ΔCPI_{t-1} is calculated in accordance with the following formula—

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

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 .

Table 1.1 Forecast changes in quantities

Regulatory year 2023	6.10%
Regulatory year 2024	3.47%

- (4) For the purposes of clause 2.2.8(8) of the **IM determination**, the depreciation method applicable to the **first regulatory period** is:
- (a) for **core fibre assets**, a depreciation method consistent with **GAAP**; and
 - (b) for the **financial loss asset**, diminishing value depreciation.

Schedule 2: Calculation of forecast allowable revenue

- (1) **Chorus** must calculate its **forecast allowable revenue** within 30 **working days** of the start of each **regulatory year**.
- (2) Within 30 **working days** of any time **Chorus** intends to change its **prices** in a **regulatory year**, **Chorus** must recalculate its **forecast allowable revenue** for that **regulatory year**.
- (3) For the purpose of paragraph (2), the ΔCPI_{t-1} calculated in accordance with paragraph (3) of Schedule 1 is deemed to be the **CPI** that was applicable at the start of that **regulatory year**.
- (4) When calculating the **forecast allowable revenue**, **Chorus** must prepare a demonstrably reasonable forecast of **pass-through costs**.
- (5) 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 **pass-through costs**; and

WUA is the **wash-up amount**.

Schedule 3: Calculation of forecast total FFLAS revenue

- (1) **Chorus** must calculate its **forecast total FFLAS revenue** within 30 **working days** of the start of each **regulatory year**.
- (2) Within 30 **working days** of any time **Chorus** intends to change its **prices** in a **regulatory year**, **Chorus** must recalculate its **forecast total FFLAS revenue** for that **regulatory year**.
- (3) When calculating the **forecast total FFLAS revenue**, **Chorus** must prepare a demonstrably reasonable forecast of the **quantities** for the **regulatory year** to which the forecast **prices** for each **regulatory year** will apply.
- (4) The 'forecast total FFLAS revenue' for a **regulatory year** is the amount calculated in accordance with the following formula—

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

where—

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

Schedule 4: Calculation of quality standards

Calculation of average unplanned downtime

- (1) 'Average unplanned downtime' for a calendar month in a **POI area** is calculated in accordance with the following formula—

$$\frac{\sum NUD}{ANAC}$$

where—

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

ANAC means **average number of connections** for that calendar month in that **POI area**.

Calculation of port utilisation

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

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

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**.