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# [DRAFT] Fibre Price-Quality Path Determination 2024

[2024] NZCC XX	
The Commission:	Tristan Gilbertson Vhari McWha Nathan Strong
Date of determination:	[date] [month] 2024
[Signature]	
Tristan Gilbertson, Telecommu	nications Commissioner
Dated at Wellington this [x] day	of [month] 2024
COMMERCE COMMISSION	

Wellington, New Zealand

Determination history		
Determination date	Decision Number	Determination name
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

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

#### 1. <u>Title</u>

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. <u>Interpretation</u>

- 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 54 of the Legislation Act 2019;
  - 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 a Schedule is a reference to a Schedule in this determination, unless otherwise specified;
  - 4.1.7 any reference to "includes" means "includes, but is not limited to"; and
  - 4.1.8 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:

Α

access seeker

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

Act

means the Telecommunications Act 2001;

agreed date

in relation to a **connection request**, means the date agreed, by **Chorus** and the **end-user**, for the **connection**;

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;

В

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;

connection measure has the meaning given in paragraph (3) of

Schedule 4;

connection request means a request for—

(a) a new **connection** for **PQ FFLAS** that is a **layer 1 service** or **layer 2 service**; or

(b) a disconnection from one type of PQ
 FFLAS that is a layer 1 service or layer
 2 service and a connection to another
 type of PQ FFLAS that is a layer 1
 service or layer 2 service,

that requires the physical attendance of a person on **Chorus's** behalf;

core fibre asset has the meaning given in the IM

determination;

**CPI** has the meaning given in the **IM** 

determination;

Ε

**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

95%;

has the same meaning as 'fibre fixed line access service' defined in s 5 of the **Act**;

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

7

#### force majeure event

means an event or circumstance beyond **Chorus's** control which makes it impossible or illegal to provide **PQ FFLAS**, including:

- (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;

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:

- (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 paragraph (3) of Schedule 2;

forecast building blocks revenue

means the amount specified in paragraphs (1) and 0 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 paragraph (3) 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;

ı

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

layer 1 communal asset means an asset specified in Schedule 5;

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

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

M

monthly 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;

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 any of the following:

- (a) a force majeure event;
- (b) non-diverse transport services; and
- (c) port utilisation equal to or greater than 95%;

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

available;

0

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;

other FFLAS income means income received by Chorus in respect

of PQ FFLAS, excluding income from PQ FFLAS

the price(s) of which are related to the

quantity supplied;

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 Notice of points of

interconnection under section 231 of the Telecommunications Act 2001 issued by the

Commission on 27 March 2024;

**PON port** means the **port** on an **OLT**;

**port** means all physical, virtual and sub-interfaces

for the exchange of traffic on a fibre network,

excluding UNI, E-NNI, and PON ports;

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 RFC 2863, issued by the IETF Interfaces MIB Working Group in June 2000;

S

second regulatory period

means the 4-year period beginning 1 January 2025 and ending 31 December 2028;

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 second regulatory period issued to Chorus on [XX] 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**;

# unplanned downtime

has the meaning given in paragraph (b) of the definition of "unplanned downtime" in the **IM determination**; and

W

working day

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

#### 5. <u>Price-quality path</u>

- 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, 8.9, and 8.11.
- 6. <u>Applicable input methodologies</u>
  - 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. <u>Assessments and quality standards</u>

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**, 80 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, 17 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; and

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

Provisioning quality standard

- 8.11 Chorus complies with the provisioning quality standard for an availability POI area for a regulatory year if—
  - 8.11.1 the **connections measure** for **connection requests** in respect of which the **agreed date** is rescheduled is 85% or more; and
  - 8.11.2 the **connections measure** for all other **connection requests** is 80% or more.
- 8.12 In clause 8.11, 'rescheduled', in relation to an **agreed date**, means rescheduled by **Chorus** on or before the **agreed date**, but does not include rescheduled by **Chorus**
  - 8.12.1 at the end-user's request; or
  - 8.12.2 because the **end-user** or a person on the **end-user's** behalf was not present when an installer attended on **Chorus's** behalf to carry out work for the **connection request** at a prearranged date and time.

#### 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**;
  - 9.1.2 the assessment specified in clause 8.7 for each month of each regulatory year of the regulatory period; and
  - 9.1.3 the quality standard specified in clause 8.11 for 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 2 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;
  - 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 occurred; and
  - 9.4.3 in the case of a breach of the quality standard specified in clause 8.11, within 5 months of the end of the regulatory year in respect of which the breach 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 **regulatory years** 2025, 2026, 2027, and 2028 is calculated in accordance with the following formula—

$$FBBR_t = SBBR_0 \times (1 + \Delta CPI_{0-t}) \times (1 + Q_{0-t})$$

where-

 $FBBR_t$  is forecast building blocks revenue for **regulatory year** t;

SBBR<sub>0</sub> is \$818,900,00, being nominal smoothed building blocks revenue at

the start of regulatory year 2025;

 $(1 + \Delta CPI_{0-t})$  is the cumulative value of change in **CPI** between 1 January 2025 and 31 December of **regulatory year** t; and

 $(1 + \Delta Q_{0-t})$  is the forecast cumulative value of change in **quantities** between 1 January 2025 and 31 December of **regulatory year** t.

For example, in regulatory year 2026,—

$$(1 + \Delta CPI_{0-2026}) = (1 + \Delta CPI_{2025}) \times (1 + \Delta CPI_{2026})$$

and—

$$(1 + \Delta Q_{0-2026}) = (1 + \Delta Q_{2025}) \times (1 + \Delta Q_{2026})$$

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

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

 $\Delta Q_t$  is the forecast changes in **quantities** listed in Table 1.1 below.

Table 1.1 Forecast changes in quantities

Regulatory year 2025	0%
Regulatory year 2026	2.56%
Regulatory year 2027	1.96%
Regulatory year 2028	1.72%

(3)  $\triangle CPI_t$  is calculated in accordance with the following formula—

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

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:
  - (a) for **core fibre assets** that are **Layer 1 communal assets**, tilted annuity depreciation with a 3.5% real tilt rate and asset lives consistent with **GAAP**;
  - (b) for all other core fibre assets, a depreciation method consistent with GAAP;and
  - (c) 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— \$49,485,000 for regulatory year 2025; (a) \$49,485,000 for regulatory year 2026; (b) \$49,485,000 for regulatory year 2027; and (c) \$49,485,000 for regulatory year 2028. (d)

#### 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 is each tariff;

*P* is the **price**;

D is any discount;

FQ is the forecast quantities; and

*FOFI* is forecast **other FFLAS income**.

# 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 <b>net unplanned downtime</b> for that calendar month in that <b>availability POI area</b> ;
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 PEC 2863, and includes framing characters.

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**.

### Calculation of connections measure

(3) The 'connections measure' for a **regulatory year** in an **availability POI area** is calculated as a percentage figure in accordance with the following formula—

$$\sum_{i=1}^{i=12} \frac{PTRC_i}{TRC_i} \times \frac{100}{M} \%$$

where—	
i	means the calendar month, where 1 = January,, 12 = December in which there was 1 or more agreed dates for connection requests in the availability POI area;
PTRC <sub>i</sub>	means the number of <b>connection requests</b> with an <b>agreed date</b> in the calendar month 'i' that were met on or before the <b>agreed date</b> in the <b>availability POI area</b> ;
TRC;	means the number of <b>connection requests</b> with an <b>agreed date</b> in the calendar month 'i' in the <b>availability POI area</b> ; and
М	means the number of calendar months in the <b>regulatory year</b> in which there was 1 or more <b>agreed dates</b> for <b>connection requests</b> in the <b>availability POI area</b> .

- (4) For the purposes of paragraph (3),—
  - (a) a **connection request** that is not met by the **agreed date** must be excluded from the variable *TRC<sub>i</sub>* if the failure to meet the **connection request** by the **agreed date** is attributable to a **force majeure event**; and
  - (b) if the **agreed date** for a **connection request** is not met, the **connection request** must be excluded from the variables *TRC<sub>i</sub>* and *PTRC<sub>i</sub>* in respect of any subsequent **agreed date** relating to the **connection request**.

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

Pre2012 L1 Duct - RBI L1 D&M Lost

Post2012Actual\_L1 Fibre Cable - RBI\_L1 FO\_Non

Post2012Forecast L1 Duct - UFB A-D L1 D&M Non

PostRABActual L1 OFDF - UFB A-D L1 FO Lost

Pre2012 L1 Duct L1 D&M Lost

Post2012Actual L1 Fibre Cable L1 FO Non

Post2012Forecast L1 Duct - UFB E L1 D&M Non

PostRABActual L1 OFDF - UFB E L1 FO Lost

Pre2012 L1 Fibre Cable - RBI L1 FO Lost

Post2012Actual L1 Manholes - RBI L1 D&M Non

Post2012Forecast\_L1 Duct\_L1 D&M\_Non

PostRABActual L1 OFDF L1 FO Lost

Pre2012 L1 Fibre Cable L1 FO Lost

Post2012Actual\_L1 Manholes - UFB E\_L1 D&M\_Non

Post2012Forecast\_L1 Fibre Cable - UFB A-D\_L1 FO\_Non

PostRABActual\_L1 Poles\_L1 Cu\_Lost

Pre2012 L1 Manholes - RBI L1 D&M Lost

Post2012Actual\_L1 Manholes\_L1 D&M\_Non

Post2012Forecast\_L1 Fibre Cable - UFB E\_L1 FO\_Non

PostRABActual L1 Splitter - UFB A-D L1 FO Lost

Pre2012 L1 Manholes L1 D&M\_Lost

Post2012Actual\_L1 OFDF - RBI\_L1 FO\_Non

Post2012Forecast L1 Fibre Cable L1 FO Non

PostRABActual L1 Cabinets - RBI L1 Cab Non

Pre2012 L1 Poles L1 Cu Lost

Post2012Actual L1 OFDF - UFB A-D L1 FO Non

Post2012Forecast L1 Manholes - UFB E L1 D&M Non

PostRABActual L1 Cabinets - UFB A-D\_L1 Cab\_Non

Pre2012 L1 Duct - RBI L1 D&M Non

Post2012Actual\_L1 Poles\_L1 Cu\_Non

Post2012Forecast L1 Manholes L1 D&M Non

PostRABActual L1 Duct - UFB A-D L1 D&M Non

Pre2012 L1 Duct L1 D&M Non

Post2012Actual L1 Cabinets - UFB A-D L1 Cab Won

Post2012Forecast L1 OFDF - UFB A-D L1 FO Non

PostRABActual L1 Duct - UFB E L1 D&M Non

Pre2012\_L1 Fibre Cable - RBI\_L1 FO\_Non

Post2012Actual\_L1 Duct - RBI\_L1 D&M\_Won

Post2012Forecast L1 Poles L1 Cu Non

PostRABActual L1 Duct L1 D&M Non

Pre2012 L1 Fibre Cable L1 FO Non

Post2012Actual L1 Duct - UFB A-D L1 D&M Won

Post2012Forecast L1 Splitter - UFB A-D L1 FO Non

PostRABActual L1 Fibre Cable - UFB A-D L1 FO Non

Pre2012 L1 Manholes - RBI L1 D&M Non

Post2012Actual\_L1 Duct - UFB E\_L1 D&M\_Won

Post2012Forecast\_L1 Cabinets - Legacy\_L1 Cab\_Won

PostRABActual\_L1 Fibre Cable - UFB E\_L1 FO\_Non

Pre2012 L1 Manholes L1 D&M Non

Post2012Actual L1 Duct L1 D&M Won

Post2012Forecast L1 Cabinets - UFB A-D L1 Cab Won

PostRABActual L1 Fibre Cable L1 FO Non

Pre2012\_L1 Poles\_L1 Cu\_Non

Post2012Actual L1 Fibre Cable - RBI L1 FO Won

Post2012Forecast L1 Duct - UFB A-D L1 D&M Won

PostRABActual L1 Manholes - UFB A-D L1 D&M Non

Pre2012 L1 Duct - RBI L1 D&M Won

Post2012Actual L1 Fibre Cable - UFB A-D L1 FO Won

Post2012Forecast L1 Duct - UFB E L1 D&M Won

PostRABActual L1 OFDF - UFB A-D L1 FO Non

Pre2012 L1 Duct L1 D&M Won

Post2012Actual L1 Fibre Cable - UFB E L1 FO Won

Post2012Forecast L1 Duct L1 D&M Won

PostRABActual L1 OFDF - UFB E L1 FO Non

Pre2012 L1 Fibre Cable - RBI L1 FO Won

Post2012Actual L1 Fibre Cable L1 FO Won

Post2012Forecast\_L1 Fibre Cable - UFB A-D\_L1 FO\_Won

PostRABActual\_L1 Poles\_L1 Cu\_Non

Pre2012 L1 Fibre Cable L1 FO Won

Post2012Actual L1 Manholes - RBI L1 D&M Won

Post2012Forecast L1 Fibre Cable - UFB E L1 FO Won

PostRABActual L1 Splitter - UFB A-D L1 FO Non

Pre2012 L1 Manholes - RBI L1 D&M Won

Post2012Actual L1 Manholes - UFB A-D L1 D&M Won

Post2012Forecast L1 Fibre Cable L1 FO Won

PostRABActual\_L1 Splitter - UFB A-D\_L2 Eq\_Non

Pre2012 L1 Manholes L1 D&M Won

Post2012Actual L1 Manholes - UFB E L1 D&M Won

Post2012Forecast L1 Manholes - UFB A-D L1 D&M Won

PostRABActual L1 Cabinets - RBI L1 Cab Won

Pre2012 L1 OFDF L1 FO Won

Post2012Actual L1 Manholes L1 D&M Won

Post2012Forecast L1 Manholes - UFB E L1 D&M Won

PostRABActual\_L1 Cabinets - UFB A-D\_L1 Cab\_Won

Pre2012 L1 Poles L1 Cu Won

Post2012Actual L1 OFDF - RBI L1 FO Won

Post2012Forecast L1 Manholes L1 D&M Won

PostRABActual\_L1 Duct - UFB A-D\_L1 D&M\_Won

Pre2012 L1 Duct L1 D&M National

Post2012Actual L1 OFDF - UFB A-D L1 FO Won

Post2012Forecast L1 OFDF - UFB A-D L1 FO Won

PostRABActual L1 Duct - UFB E L1 D&M Won

Pre2012\_L1 Manholes\_L1 D&M\_National

Post2012Actual\_L1 Poles\_L1 Cu\_Won

Post2012Forecast L1 OFDF L1 FO Won

PostRABActual L1 Duct L1 D&M Won

Pre2012 L1 Poles L1 Cu National

Post2012Actual L1 Splitter - UFB A-D L1 FO Won

Post2012Forecast L1 Poles L1 Cu Won

PostRABActual L1 Fibre Cable - UFB A-D L1 FO Won

Post2012Actual L1 Cabinets - Legacy L1 Cab Lost

Post2012Actual L1 Cabinets - Legacy L1 Cab National

Post2012Forecast L1 Splitter - UFB A-D L1 FO Won

PostRABActual L1 Fibre Cable - UFB E L1 FO Won

Post2012Actual L1 Duct - RBI L1 D&M Lost

Post2012Actual L1 Duct L1 D&M National

Post2012Forecast L1 Splitter L1 FO Won

PostRABActual L1 Fibre Cable L1 FO Won

Post2012Actual\_L1 Duct - UFB A-D\_L1 D&M\_Lost

Post2012Actual L1 Fibre Cable - RBI L1 FO National

Post2012Forecast L1 Fibre Cable - RBI L1 FO National

PostRABActual L1 Manholes - UFB A-D L1 D&M Won

Post2012Actual L1 Duct - UFB E L1 D&M Lost

Post2012Actual L1 Fibre Cable L1 FO National

Post2012Forecast\_L1 Fibre Cable\_L1 FO\_National

PostRABActual L1 OFDF - UFB E L1 FO Won

Post2012Actual L1 Duct L1 D&M Lost

Post2012Actual L1 Poles L1 Cu National

Post2012Forecast L1 Manholes - RBI L1 D&M National

PostRABActual L1 Poles L1 Cu Won

Post2012Actual L1 Fibre Cable - RBI L1 FO Lost

Post2012Actual L1 Splitter - UFB A-D L1 FO National

Post2012Forecast L1 Manholes L1 D&M National

PostRABActual L1 Splitter - UFB A-D L1 FO Won

Post2012Actual\_L1 Fibre Cable - UFB A-D\_L1 FO\_Lost

Post2012Actual\_L1 Splitter - UFB A-D\_L2 Eq\_National

Post2012Forecast L1 Poles L1 Cu National

PostRABActual L1 Splitter - UFB A-D L2 Eq Won

Post2012Actual\_L1 Fibre Cable - UFB E\_L1 FO\_Lost

Post2012Actual L1 Splitter L1 FO National

Post2012Forecast\_L1 Splitter - UFB A-D\_L1 FO\_National

PostRABActual L1 Cabinets - RBI L1 Cab National

Post2012Actual\_L1 Fibre Cable\_L1 FO\_Lost

Post2012Actual\_L1 Splitter\_L2 Eq\_National

Post2012Forecast\_L1 Splitter\_L1 FO\_National

PostRABActual L1 Cabinets - UFB A-D L1 Cab National

Post2012Actual\_L1 Manholes - RBI\_L1 D&M\_Lost

Post2012Forecast L1 Cabinets - Legacy L1 Cab Lost

PostRABActual L1 Cabinets - Legacy L1 Cab Lost

PostRABActual\_L1 Duct - UFB A-D\_L1 D&M\_National

Post2012Actual\_L1 Manholes\_L1 D&M\_Lost

Post2012Forecast L1 Duct - UFB E L1 D&M Lost

PostRABActual L1 Cabinets - UFB E L1 Cab Lost

PostRABActual L1 Duct - UFB E L1 D&M National

Post2012Actual L1 OFDF - RBI L1 FO Lost

Post2012Forecast L1 Duct L1 D&M Lost

PostRABActual L1 Duct - UFB A-D L1 D&M Lost

PostRABActual L1 Duct L1 D&M National

Post2012Actual\_L1 OFDF - UFB A-D\_L1 FO\_Lost

Post2012Forecast\_L1 Fibre Cable - UFB E\_L1 FO\_Lost

PostRABActual L1 Duct - UFB E L1 D&M Lost

PostRABActual L1 Fibre Cable - UFB A-D L1 FO National

Post2012Actual L1 OFDF - UFB E L1 FO Lost

Post2012Forecast L1 Fibre Cable L1 FO Lost

PostRABActual L1 Duct L1 D&M Lost

PostRABActual\_L1 Fibre Cable - UFB E\_L1 FO\_National

Post2012Actual L1 Poles L1 Cu Lost

Post2012Forecast L1 Manholes - UFB E L1 D&M Lost

PostRABActual L1 Fibre Cable - UFB A-D L1 FO Lost

PostRABActual L1 Fibre Cable L1 FO National

Post2012Actual L1 Cabinets - UFB A-D L1 Cab Non

Post2012Forecast L1 Manholes L1 D&M Lost

PostRABActual L1 Fibre Cable - UFB E L1 FO Lost

PostRABActual\_L1 Manholes - UFB A-D\_L1 D&M\_National

Post2012Actual L1 Duct - RBI L1 D&M Non

Post2012Forecast L1 OFDF - UFB A-D L1 FO Lost

PostRABActual L1 Fibre Cable L1 FO Lost

PostRABActual L1 OFDF - UFB A-D L1 FO National

Post2012Actual L1 Duct - UFB A-D L1 D&M Non

Post2012Forecast\_L1 OFDF - UFB E\_L1 FO\_Lost

PostRABActual\_L1 Manholes - UFB A-D\_L1 D&M\_Lost

PostRABActual\_L1 OFDF - UFB E\_L1 FO\_National

Post2012Actual L1 Duct - UFB E L1 D&M Non

Post2012Forecast\_L1 Poles\_L1 Cu\_Lost

PostRABActual L1 Manholes - UFB E L1 D&M Lost

PostRABActual\_L1 Poles\_L1 Cu\_National

Post2012Actual L1 Duct L1 D&M Non

Post2012Forecast\_L1 Cabinets - Legacy\_L1 Cab\_Non

PostRABActual L1 Manholes L1 D&M Lost

PostRABActual L1 Splitter - UFB A-D L1 FO National

PostRABForecast C1 Property - Buildings - Short life L1 Other Non

PostRABActual\_L1 Splitter - UFB A-D\_L2 Eq\_National