



ISBN 978-1-869457-78-5
Decision Series
Project no. 16531

Public version

[Draft] Fibre Input Methodologies Determination 2020

[2020] NZCC [XX]

The Commission:

Dr Stephen Gale
Elisabeth Welson
John Crawford
Sue Begg

Date of decision:

[day] [month] 2020

[signature]

[name], Commissioner

Dated at Wellington this [day] of [month] 2020

COMMERCE COMMISSION

Wellington, New Zealand

Determination history		
Determination date	Decision number	Determination name
[day] [month] 2020	[2020] NZCC [XX]	Fibre Input Methodologies Determination 2020

FIBRE INPUT METHODOLOGIES DETERMINATION 2020

PART 1	GENERAL PROVISIONS	5
PART 2	INPUT METHODOLOGIES FOR INFORMATION DISCLOSURE	40
SUBPART 1	Cost allocation	40
SUBPART 2	Asset valuation	43
SUBPART 3	Taxation	58
SUBPART 4	Cost of capital.....	63
SUBPART 5	Quality dimensions.....	75
PART 3	INPUT METHODOLOGIES FOR PRICE-QUALITY PATHS.....	77
SUBPART 1	Cost allocation.....	77
SUBPART 2	Asset valuation	78
SUBPART 3	Taxation	81
SUBPART 4	Cost of capital.....	82
SUBPART 5	Quality dimensions.....	90
SUBPART 6	Capital expenditure	91
SECTION 1	General rules and processes for capital expenditure proposals.....	91
SECTION 2	Base capex	94
SECTION 3	Connection capex	97
SECTION 4	Individual capex proposals.....	100
SUBPART 7	Capital expenditure evaluation by the Commission.....	104
SECTION 1	General rules for Commission determination processes.....	104
SECTION 2	Evaluation criteria – expenditure objective and assessment factors	105
SCHEDULE A	Minimum levels of specificity to describe assets in RAB.....	107

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

PART 1 GENERAL PROVISIONS

1.1.1 Title

- (1) This determination is the Fibre Input Methodologies Determination 2020.

1.1.2 Application

- (1) The **input methodologies** in this determination apply to **regulated FFLAS**.
- (2) The **input methodologies** in-
 - (a) Part 2 of this determination apply to information disclosure regulation under Part 6 Subpart 4 of the **Act**; and
 - (b) Part 3 of this determination apply to price-quality regulation under Part 6 Subpart 5 of the **Act**.

1.1.3 Commencement

- (1) This determination comes into force on the day after the date on which **public notice** of it is given under s 180 of the **Act**.

1.1.4 Interpretation

- (1) In this determination-
 - (a) unless stated otherwise, references to-
 - (i) 'Sections' are to sections within the same subpart in which the reference is made; and
 - (ii) 'Subparts' are to Subparts within the same part in which the reference is made;
 - (b) unless stated otherwise, references to Parts, Subparts and Sections are to named and numbered parts, subparts and sections of the determination;
 - (c) unless the context otherwise requires, a word which denotes the singular also denotes the plural and vice versa;
 - (d) unless stated otherwise, any reference to an allowance, amount, cost, sum or value is a reference to an allowance, amount, cost, value or sum calculated or determined in relation to a **regulated provider** in respect of a **disclosure year**;
 - (e) unless stated otherwise, any reference to "includes" means "includes, but is not limited to"; and
 - (f) materials incorporated by reference into this determination, including standards promulgated by other bodies, are incorporated in accordance with section 223 of the **Act** and Schedule 5 of the Commerce Act 1986.
- (2) In this determination, including in the schedules, words or phrases in bold type bear the following meanings:

#

30 June 2012 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2013 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2014 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2015 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2016 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2017 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2018 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2019 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2020 WACC	has the meaning specified in clause 2.4.10(2);
30 June 2021 WACC	has the meaning specified in clause 2.4.10(2);
30 November 2011 WACC	has the meaning specified in clause 2.4.10(2);
50th percentile estimate of WACC	means, for the purpose of- (a) Part 2, the 50th percentile estimate of post-tax WACC , determined in accordance with clause 2.4.5(1); (b) Part 2, the 50th percentile estimate of vanilla WACC , determined in accordance with clause 2.4.5(1); (c) Part 3, the 50th percentile estimate of post-tax WACC , determined in accordance with clause 3.4.5(2); (d) Part 3, the 50th percentile estimate of vanilla WACC , determined in accordance with clause 3.4.5(1);

A

ABAA	means accounting-based allocation approach, as described in, in the case of- (a) operating costs , clause 2.1.2(1); and (b) asset values , clause 2.1.2(2);
access seeker	has the same meaning as defined in s 5(d) of the Act ;

accumulated unrecovered returns	has the same meaning as defined in s 177(6) of the Act and is calculated in accordance with clause 2.2.3(3);
Act	means the Telecommunications Act 2001;
adjusted tax value	has the same meaning as in the tax rules ;
adjusted UFB asset initial values	has the meaning specified in clause 2.3.4(3);
allocator metric	means the value in units for each cost allocator or asset allocator used to calculate the proportion of operating costs or asset values to be allocated to regulated FFLAS , services that are not regulated FFLAS , services that are not UFB FFLAS , or UFB FFLAS ;
allocator type	means the basis for the attribution or allocation of an operating cost or asset value to regulated FFLAS , services that are not regulated FFLAS , services that are not UFB FFLAS , and UFB FFLAS ;
approved capex	means capital expenditure that is part of a capex allowance ;
approved timeframes	means the proposed timeframe set out in the individual capex design proposal in accordance with clause 3.6.22(2)(d) and approved by the Commission in accordance with clause 3.6.23(1)(a) or (b);
arm’s-length transaction	means a transaction conducted on such terms and conditions as between a willing buyer and a willing seller who are unrelated and who are acting independently of each other and pursuing their own best interests;
assessment factors	means the component or elements of information that need to be considered when evaluating whether capex meets the capital expenditure objective as set out in clause 3.7.6(1);

asset allocator	means a proportion of a quantifiable measure used to allocate asset values whose quantum is- <ul style="list-style-type: none"> (a) based on a causal relationship; or (b) equal to a proxy asset allocator;
asset life	has the meaning specified in clause 2.2.9(1);
asset value	means: <ul style="list-style-type: none"> (a) in respect of a core fibre asset, the unallocated opening RAB value; and (b) in respect of a UFB asset, the value determined under clause 2.1.4(2)(a);
auditor	means a person who- <ul style="list-style-type: none"> (a) is qualified for appointment as auditor of a company under the Companies Act 1993; (b) is independent; (c) is not an independent verifier of the capex proposal; (d) has not assisted with the compilation of the information in the capex proposal; (e) has not provided opinions or advice (other than in relation to audit reports) on the methodologies or processes used or to be used in compiling the information in that proposal; and (f) is neither professionally associated with nor directed by any person who has provided such assistance, opinions or advice;
availability	means the extent to which a fibre network is available, including the extent to which an access seeker or an end-user can use regulated FFLAS ;
average debt premium	has the meaning specified in, and is the amount determined in accordance with- <ul style="list-style-type: none"> (a) Part 2, clause 2.4.4(2); and (b) Part 3, clause 3.4.4(2);

avoided financing cost building block has the meaning specified in clause 2.2.3(25);

B

base capex means **capital expenditure** by **Chorus** that is incurred in relation to one or more **base capex sub-categories**, but excludes **connection capex** or **individual capex**;

base capex allowance means the amount determined by the **Commission** in accordance with clause 3.6.11(1);

base capex information request means the request made by the **Commission** to **Chorus** in accordance with clause 3.6.7(10);

base capex proposal means a written application submitted by **Chorus** to the **Commission** for approval of a **base capex project** or **base capex programme** in accordance with the requirements set out in clauses 3.6.7-3.6.10;

base capex sub-category means an expenditure category identified and agreed between the **Commission** and **Chorus** for the **base capex proposal** in accordance with clause 3.6.7(4)(a) or (5);

base year means a **disclosure year** determined by the **Commission**;

brownfield means existing dwellings or premises;

building block allowable revenue means [Regulatory Processes and Rules];

business day means any day on which statistics relating to trading in New Zealand government bonds are published by a financial information service such as Bloomberg or Reuters;

C

capex allowance means one or more of the following:
(a) **base capex allowance**;
(b) **connection capex allowance**; and
(c) **individual capex allowance**;

capex category	means a category specified in clause 3.6.1(1);
capex proposal	means a base capex proposal , a connection capex baseline proposal , or an individual capex proposal ;
capital contribution	<p>(a) means money or the monetary value of other considerations charged to or received in relation to the construction, acquisition or enhancement of a fibre asset or UFB asset by a regulated provider from 1 or more of the following:</p> <ul style="list-style-type: none"> (i) an access seeker; (ii) an end-user; or (iii) any other party; but <p>(b) does not include any Crown financing;</p>
capital expenditure (capex)	<p>means costs that-</p> <p>(a) have been, or are intended to be, incurred in the acquisition or development of a fibre asset that is, or is intended to be, commissioned; and</p> <p>(b) are eligible, or would be eligible, to be included in the value of commissioned asset;</p>
capital expenditure objective	has the meaning in clause 3.7.5(2);
causal relationship	<p>means, in relation to-</p> <p>(a) operating costs, a circumstance in which a cost driver leads to an operating cost being incurred during the 12-month period terminating on the last day of the disclosure year or financial loss year in respect of which the cost allocation is carried out; and</p> <p>(b) asset values, a circumstance in which a factor influences the employment of an asset:</p> <ul style="list-style-type: none"> (i) for information disclosure purposes, during the disclosure year or financial loss year in

- respect of which the asset allocation is carried out; and
- (ii) for price-quality regulation purposes, in each **regulatory year** in respect of the next **regulatory period** of which the asset allocation is forecast to be carried out,

which in each case is:

- (c) consistent with similar circumstances, both within a **disclosure year** or **financial loss year** and from year to year; and
- (d) objectively justifiable and demonstrably reasonable;

CEO	means the Chief Executive Officer of a company or equivalent comparable senior executive;
certification	means the process specified in clause 3.6.3 and in accordance with any specific certification requirements for the relevant capex category related to a capex proposal ;
Chorus	means Chorus Limited or any subsidiary of, or successor to, that company;
closing balance of unrecovered returns on investment for notional deductible interest	has the meaning specified in clause 2.3.4(5);
closing RAB value	means the value- <ul style="list-style-type: none"> (a) determined, in respect of a core fibre asset for the purpose of Part 2, in accordance with clause 2.2.4(4); (b) determined, in respect of a partly deregulated asset for the purpose of Part 2, in accordance with clause 2.2.4(5); (c) determined, in respect of the financial loss asset for the purpose of Part 2, in accordance with clause 2.2.5(2);

	(d) determined, in respect of a core fibre asset for the purpose of Part 3, in accordance with clause 3.2.1(3); and
	(e) determined, in respect of the financial loss asset for the purpose of Part 3, in accordance with clause 3.2.1(3);
closing UFB asset base value	has the meanings specified in clause 2.2.3(27);
Commission	has the same meaning as defined in s 5 of the Act ;
commissioned	means: <ul style="list-style-type: none"> (a) for the purpose of determining the unrecovered returns on investment under clause 2.2.3, employed by a regulated provider in providing UFB FFLAS (whether or not the UFB asset is also employed in providing other services); and (b) in all other instances, employed by a regulated provider in providing regulated FFLAS (whether or not the fibre asset is also employed in providing other services), <p>and commission has a corresponding meaning;</p>
commissioning date	means the date that a UFB asset or a fibre asset is first commissioned ;
communal fibre network	means a fibre network that is independent of any end-user specific infrastructure and that is not located on end-user premises;
compounded unrecovered return for financial loss year 2012	has the meaning specified in clause 2.2.3(4);
compounded unrecovered return for financial loss year 2013	has the meaning specified in clause 2.2.3(5);

compounded unrecovered return for financial loss year 2014	has the meaning specified in clause 2.2.3(6);
compounded unrecovered return for financial loss year 2015	has the meaning specified in clause 2.2.3(7);
compounded unrecovered return for financial loss year 2016	has the meaning specified in clause 2.2.3(8);
compounded unrecovered return for financial loss year 2017	has the meaning specified in clause 2.2.3(9);
compounded unrecovered return for financial loss year 2018	has the meaning specified in clause 2.2.3(10);
compounded unrecovered return for financial loss year 2019	has the meaning specified in clause 2.2.3(11);
compounded unrecovered return for financial loss year 2020	has the meaning specified in clause 2.2.3(12);
compounded unrecovered return for financial loss year 2021	has the meaning specified in clause 2.2.3(13);
compounding factor for financial loss year 2012	has the meaning specified in clause 2.2.3(14);
compounding factor for financial loss year 2013	has the meaning specified in clause 2.2.3(15);
compounding factor for financial loss year 2014	has the meaning specified in clause 2.2.3(16);
compounding factor for financial loss year 2015	has the meaning specified in clause 2.2.3(17);
compounding factor for financial loss year 2016	has the meaning specified in clause 2.2.3(18);

compounding factor for financial loss year 2017	has the meaning specified in clause 2.2.3(19);
compounding factor for financial loss year 2018	has the meaning specified in clause 2.2.3(20);
compounding factor for financial loss year 2019	has the meaning specified in clause 2.2.3(21);
compounding factor for financial loss year 2020	has the meaning specified in clause 2.2.3(22);
compounding factor for financial loss year 2021	has the meaning specified in clause 2.2.3(23);
compounding factor for financial loss year 2022	has the meaning specified in clause 2.2.3(24);
connection capex	means capital expenditure by Chorus that is incurred in relation to connecting new end-user premises where the communal fibre network already exists or will exist at the time of connection, and is made up of a connection capex baseline component and a connection capex variable component, and includes: <ul style="list-style-type: none"> (a) UFB initiative brownfield connection expenditure; (b) UFB initiative greenfield and infill expenditure; and (c) Chorus initiated migration from copper fixed line access services to regulated FFLAS;
connection capex allowance	means the amount determined by the Commission in accordance with clause 3.6.12;
connection capex annual report	means a written statement made by Chorus under clause 3.6.17;
connection capex baseline allowance	means the amount determined by the Commission in accordance with clause 3.6.19(1);
connection capex baseline proposal	means a written application submitted by Chorus to the Commission in accordance with

	the requirements set out in clauses 3.6.13-3.6.16;
connection capex information request	means the information required by the Commission from Chorus in accordance with clause 3.6.13(8);
connection capex variable adjustment	means the amount determined by the Commission in accordance with clause 3.6.20;
connection type	means a category or class of end-user connections that are similar in characteristics and cost;
connection unit rate	means a per end-user connection average cost for a connection type ;
copper fixed line access services	has the same meaning as defined in s 5 of the Act ;
core fibre asset	means a fibre asset employed in the provision of regulated FFLAS (whether or not the asset is also employed in the provision of other services), and excludes- <ul style="list-style-type: none"> (a) the financial loss asset; (b) intangible assets, unless they are- <ul style="list-style-type: none"> (i) finance leases; or (ii) identifiable non-monetary assets whose costs do not include (wholly or partly) pass-through costs or recoverable costs; and (c) works under construction;
corporate tax rate	means the rate of income taxation applying to companies as specified in the tax rules ;
cost allocator	means a proportion of a quantifiable measure used to allocate operating costs whose quantum is- <ul style="list-style-type: none"> (a) based on a causal relationship; or (b) equal to a proxy cost allocator;

cost of capital	has the meaning specified in clause 2.4.10(5);
cost of debt	means: <ul style="list-style-type: none"> (a) for the purpose of clause 2.3.1(7)(b), the amount specified for r_d in clause 2.4.1(3); (b) for the purpose of determining accumulated unrecovered returns, the amount specified for r_d in clause 2.4.10(3); and (c) for the purpose of Part 3, the amount specified for r_d in clause 3.4.1(3);
CPI	means- <ul style="list-style-type: none"> (a) subject to paragraph (b), the consumer price index stipulated for each quarter in the 'All Groups Index SE9A' as published by Statistics New Zealand; and (b) in respect of quarters prior to any quarter in which the rate of GST is amended after this determination comes into force, the same index as described in paragraph (a), multiplied by the Reserve Bank of New Zealand's forecast change in that index (expressed as a decimal) arising from the amendment;
Crown financing	has the same meaning as defined in s 164(1) of the Act ;
current value of initial core fibre asset base	has the meaning specified in clause 2.2.5(7);
customer premises equipment	means the items necessary to allow regulated FFLAS to function in an end-user's physical location and includes the ONT or modem;
customer service	means the way a regulated provider interacts with access seekers and end-users ;
D	
debt issuance costs	means costs associated with the issuance of debt by a regulated provider ;

debt premium	<ul style="list-style-type: none"> (a) for the purpose of estimating the WACC for accumulated unrecovered returns, has the meaning specified in, and is the amount determined in accordance with, clause 2.4.13(2); (b) for all other purposes, has the meaning specified in, and is the amount determined in accordance with, clause 2.4.4(4);
debt premium reference year	<p>means a 12-month period ending on 31 August;</p> <p><i>For instance, 'debt premium reference year 2022' means the 12-month period ending 31 August 2022;</i></p>
dedicated asset	<p>means a core fibre asset operated for the benefit of a particular customer under a fixed term agreement for the provision of regulated FFLAS between the regulated provider in question and customer, and which is not expected to be employed by the regulated provider to provide regulated FFLAS beyond the term of the fixed term agreement;</p>
depreciation	<p>means an allowance in the disclosure year in question to account for the diminution in the remaining asset life of a fibre asset with respect to its opening RAB value, where the amount of such allowance is,-</p> <ul style="list-style-type: none"> (a) for regulated providers subject only to information disclosure regulation in regulations made under s 226 of the Act, determined in respect of a fibre asset for the purpose of Part 2, in accordance with clause 2.2.6(3); and (b) for regulated providers subject to both information disclosure regulation and price-quality regulation in regulations made under s 226 of the Act,- <ul style="list-style-type: none"> (i) determined in respect of fibre assets for the purpose of Part 2, in

accordance with clause 2.2.7(3);
and

- (ii) determined, in respect of **fibre assets** for the purpose of Part 3, in accordance with clause 3.2.2(3);

deregulated asset

means:

- (a) for the purpose of Part 2, a **core fibre asset** with an **asset value** that is **directly attributable** to the provision of **regulated FFLAS**, where that service, or the circumstances in which that service is supplied, has been removed from information disclosure regulation under s 226 of the **Act**; and
- (b) for the purpose of Part 3, a **core fibre asset** with an **asset value** that is **directly attributable** to the provision of **regulated FFLAS**, where that service, or the circumstances in which that service is supplied, has been removed from price-quality regulation under s 226 of the **Act**;

deregulated asset value

means, in respect of a **deregulated asset**, the value of a **core fibre asset** that is **directly attributable** to the provision of **regulated FFLAS** immediately prior to that asset becoming a **deregulated asset**;

deregulation adjustment

means the amount determined in accordance with clause 2.2.5(3);

directly attributable

means-

- (a) in relation to a service, **operating costs** wholly and solely incurred by a **regulated provider** in the provision of **regulated FFLAS** or **services that are not regulated FFLAS**; and
- (b) in relation to an asset, **asset values** wholly and solely related to an asset employed by a **regulated provider** in the

provision of **regulated FFLAS** or **services that are not regulated FFLAS**;

director

means, in the case of a **regulated provider** that is-

- (a) a company (as 'company' is defined in s 2 of the Companies Act 1993), an individual occupying the position of director of the **regulated provider**, by whatever name that position is called;
- (b) a partnership (other than a special partnership), a partner;
- (c) a special partnership, a general partner; and
- (d) any other body corporate or unincorporated body, an individual occupying a position in the body that is comparable with that of director of a company;

disclosure year

means a 12-month period ending on the date specified in an **ID determination**;

disposed asset

means a **fibre asset** or **UFB asset** that, in the **disclosure year** or **financial loss year** in question, has been sold or transferred, or has been irrecoverably removed from the **regulated provider's** possession without consent;

downtime

means the length of time an **access seeker** or **end-user** experiences an **outage** to their **regulated FFLAS**;

E

easement

means a right to use but not possess **land** belonging to another person or a right to prevent certain uses of another person's **land**;

easement land

means **land** acquired with the intention of-

- (a) creating an **easement** in respect of it; and
- (b) disposed of the **land** thereafter;

end-user has the same meaning as defined in s 5 of the **Act**;

F

fault means an **outage** to an **access seeker's** or **end-user's regulated FFLAS** caused by a **fibre network** failure or system failure, and excludes:

- (a) service **outages** initiated by that **end-user** or an **access seeker**: and
- (b) **end-user** or **access seeker** owned **customer premises equipment outages**;

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

FFLAS product families means a group of **regulated FFLAS** products that differ in configuration but bear essentially the same costs;

fibre asset has the same meaning as defined in s 177(6) of the **Act**, and is either-

- (a) a **core fibre asset**; or
- (b) the **financial loss asset**;

fibre network has the same meaning as defined in s 5 of the **Act**;

fibre network operator means a **network operator** of a **fibre network**;

finance lease has the same meaning as under **GAAP**;

financial loss asset means the **fibre asset** each **regulated provider** is treated as owning under s 177(2) of the **Act**;

financial loss period means the period starting on 1 December 2011 and ending on the close of the day immediately before the **implementation date**;

financial loss year means, for the purpose of determining **accumulated unrecovered returns** in accordance with clause 2.2.3, a period of 12 months beginning on 1 July in any year within the **financial loss period** and ending on 30

June in the following year, where if the term “financial loss year” is combined with a year, the 12-month period ending on 30 June of that year (for instance, “**financial loss year 2013**” means the 12-month period ending on 30 June 2013), and:

- (a) the period from 1 December 2011 to 30 June 2012 is considered “**financial loss year 2012**”; and
- (b) the period from 1 July 2021 to the close of the day immediately before the **implementation date** is considered “**financial loss year 2022**”;

first regulatory period

means the **regulatory period** that starts on the **implementation date** and lasts for a period of 3 years;

fixed life easement

means an **easement** that-

- (a) is of a fixed duration; or
- (b) is of an indefinite duration but is to be held for a fixed period;

frame delay

means the time taken for a data frame to transit a **fibre network** between points of ingress and egress;

frame delay variation

means the variation in **frame delay** over time;

frame loss

means the number of frames that are lost between points of ingress and egress over the **fibre network**, expressed as a percentage;

G

GAAP

means generally accepted accounting practice in New Zealand, save that, where the cost of an asset is being determined in accordance with this determination, only the cost model of recognition is applied insofar as an election may be made between the cost model of recognition and the fair value model of recognition;

good telecommunications industry practice	means the exercise of a degree of skill, diligence, prudence, foresight and economic management, that would reasonably be expected from a skilled and experienced asset owner engaged in the management of a fibre network under comparable conditions. A decision on good telecommunications industry practice should take into account domestic and international best practice, including international standards and factors such as the relative size, age and technology of the relevant fibre network and domestic regulatory and market conditions, including applicable law;
greenfield	means the establishment of new dwellings or premises on previously undeveloped land;
GST	has the same meaning as defined in s YA 1 of the Income Tax Act 2007;
I	
ID determination	means an information disclosure determination in relation to a regulated provider made under s 170 of the Act ;
identifiable non-monetary asset	has the same meaning as under GAAP (which, for the avoidance of doubt, includes right-of-use assets) except that it excludes goodwill;
implementation date	has the same meaning as defined in s 5 of the Act ;
independent	means a person having neither a relationship with, nor an interest in, the regulated provider in question that is likely to involve them or it in a conflict of interest between their or its duties to the regulated provider and their or its duties to the Commission ;
independent verification report	means a report prepared by an independent verifier to verify the information provided with a capex proposal according to the

	verification requirements for that capex category ;
independent verifier	means a person who – (a) is independent ; and (b) has been engaged to verify part or all of Chorus’s capex proposal ;
individual capex	means capital expenditure by Chorus that is incurred in relation to a project or programme where the capital expenditure for regulated FFLAS on that project or programme amounts to at least \$5 million;
individual capex allowance	means the amount determined by the Commission in accordance with clause 3.6.27(1)(a) or (b);
individual capex design proposal	means a written notification submitted by Chorus to the Commission in accordance with clause 3.6.22;
individual capex programme	means a programme that is the subject of an individual capex proposal specified in clause 3.6.21(3)(b);
individual capex project	means a project that is the subject of an individual capex proposal specified in clause 3.6.21(3)(b);
individual capex proposal	means a written application submitted by Chorus to the Commission for approval of an individual capex project or individual capex programme in accordance with the requirements in clauses 3.6.24-3.6.26;
infill	means the establishment of new dwellings or premises within an existing suburb or developed area;
initial RAB	has the meaning specified in clause 2.2.1;
initial RAB value	means the value- (a) in respect of a core fibre asset in the initial RAB , determined in accordance with clause 2.2.2(2);

	(b) in respect of the financial loss asset in the initial RAB , determined in accordance with clause 2.2.3(1);
initial value of core fibre asset base	has the meaning specified in clause 2.2.5(8);
input methodology	has the same meaning, as the case may require, as defined in s 164 of the Act or s 52C of the Commerce Act 1986;
integrated fibre plan	means a collection of documents set out in clause 3.6.6, provided annually to the Commission , that will provide an overview of Chorus's management of its fibre network and the related capital expenditure requirements;
investment grade credit rated	means endorsed with a credit rating by an established credit rating agency (such as Standard and Poor's) of "investment grade" on that agency's credit rating scale applicable to long-term investments;
L	
land	excludes easements ;
leverage	means the ratio of debt capital to total capital and is 31%;
LFC	has the same meaning as defined in s 156AB of the Act ;
LFC fibre network	has the same meaning as defined in s 156AB of the Act ;
local authority	has the same meaning as defined in s 5(1) of the Local Government Act 2002;
M	
maximum revenues	means the amount of maximum revenues, specified in a PQ determination , that may be recovered by a regulated provider ;
mid-point estimate of WACC	means, for the purpose of-

- (a) Part 2, the mid-point estimate of-
 - (i) vanilla **WACC** as estimated in accordance with clause 2.4.1(1); or
 - (ii) post-tax **WACC** as estimated in accordance with clause 2.4.1(2), as the case may be;
- (b) Part 3, the mid-point estimate of-
 - (i) vanilla **WACC** as estimated in accordance with clause 3.4.1(1); or
 - (ii) post-tax **WACC** as estimated in accordance with clause 3.4.1(2), as the case may be;

multi-rate PIE

has the same meaning as defined in s YA 1 of the Income Tax Act 2007;

N

Nelson-Siegel-Svensson approach

means a method for modelling yield curves and term structures of interest rates which establishes a relationship between terms to maturity and the **debt premium**, where a curve is generated by changing the parameters of a yield curve's functional form to minimise the squared deviation between estimated and observed values;

network operator

has the meaning as defined in s 5 of the **Act**;

network spare

means an **asset** that is held by a **regulated provider** to replace any other **core fibre asset** or **UFB asset** it holds should that other **core fibre asset** or **UFB asset** be withdrawn from use owing to failure or damage;

notional deductible interest

has the meaning in clause 2.3.1(7);

notional tax asset value

has the meaning in clause 2.3.2(3);

NZ IAS 24

means *New Zealand Equivalent to International Accounting Standard 24, Related Party Disclosures (NZ IAS 24)*, issued by the

New Zealand Accounting Standards Board of the External Reporting Board in November 2009, incorporating amendments to 31 December 2015, under s 24(1)(a) of the Financial Reporting Act 1993;

O

ONT	means optical network terminal;
opening balance of unrecovered returns on investment for notional deductible interest	has the meaning specified in clause 2.3.4(4);
opening RAB value	means the value- <ul style="list-style-type: none">(a) determined, in respect of a core fibre asset for the purpose of Part 2, in accordance with clause 2.2.4(3);(b) determined, in respect of the financial loss asset for the purpose of Part 2, in accordance with clause 2.2.5(1);(c) determined, in respect of a core fibre asset for the purpose of Part 3, in accordance with clause 3.2.1(3); and(d) determined, in respect of the financial loss asset for the purpose of Part 3, in accordance with clause 3.2.1(3);
opening UFB asset base value	<ul style="list-style-type: none">(a) for the purpose of calculating accumulated unrecovered returns under clause 2.2.3(3), has the meanings specified in clause 2.2.3(27); and(b) for the purpose of determining the regulatory tax asset value, has the meaning specified in clause 2.3.2(6);
operating cost	means: <ul style="list-style-type: none">(a) for the purpose of clause 2.1.4 and 2.2.3(27), a cost incurred by a regulated provider in the provision of-<ul style="list-style-type: none">(i) UFB FFLAS alone;(ii) services that are not UFB FFLAS alone; or

- (iii) **UFB FFLAS** and one or more **services that are not UFB FFLAS**,
and excludes-
 - (iv) a cost that is treated as a cost of an asset by **GAAP**;
 - (v) amounts that are tax, subvention payments, revaluations or an interest expense, in accordance with their meanings under **GAAP**;
 - (vi) **debt issuance costs**;
 - (vii) **pass-through costs**;
 - (viii) **recoverable costs**; and
 - (ix) **pecuniary penalties**; and
- (b) in all other instances, a cost incurred by a **regulated provider** in the provision of-
 - (i) **regulated FFLAS** alone;
 - (ii) **services that are not regulated FFLAS** alone; or
 - (iii) **regulated FFLAS** and one or more **services that are not regulated FFLAS**,
and excludes-
 - (iv) a cost that is treated as a cost of an asset by **GAAP**;
 - (v) amounts that are depreciation, tax, subvention payments, revaluations or an interest expense, in accordance with their meanings under **GAAP**;
 - (vi) **debt issuance costs**;
 - (vii) **pass-through costs**;
 - (viii) **recoverable costs**; and
 - (ix) **pecuniary penalties**;

operating expenditure

- for the purpose of-
- (a) Part 2, has the meaning specified in clause 2.2.3(27); and
 - (b) Subparts 6 and 7 of Part 3, means the value of **operating costs** attributable to

regulated FFLAS supplied by **Chorus** which are incurred in a **regulatory period**;

ordering means the process by which a **regulated provider** manages a request from an **access seeker** to connect an **end-user** to the **fibre network**, including how it accepts or rejects requests;

outage means an instance in which an **access seeker** or an **end-user** is unable to use **regulated FFLAS**;

P

Part 4 regulated service means a service that is subject to regulation under Part 4 of the Commerce Act 1986;

Part 4 regulated supplier means a supplier of **regulated goods or services**;

partly deregulated asset means-

- (a) for the purpose of Part 2, a **core fibre asset** with an **asset value** that is not **directly attributable** to the provision of **regulated FFLAS**, where that service or the circumstances in which that service is supplied, has been removed from information disclosure regulation under s 226 of the **Act**; and
- (b) for the purpose of Part 3, a **core fibre asset** with an **asset value** that is not **directly attributable** to the provision of **regulated FFLAS**, where that service or the circumstances in which that service is supplied, has been removed from price-quality regulation under s 226 of the **Act**;

partly deregulated asset value means the value of a **core fibre asset** that is not **directly attributable** to **regulated FFLAS** which has been removed from information disclosure regulation under s 226 of the **Act**;

pass-through cost	has the meaning specified in clause [Regulatory Processes and Rules];
pecuniary penalties	means fines or penalties imposed- (a) by a court; or (b) by any other body with a statutory power to impose such fines or penalties;
performance	means the technical performance of a fibre network , including the extent to which this affects the regulated FFLAS experienced by an access seeker or an end-user ;
port utilisation	means the amount of traffic on a fibre network port relative to the port's capacity over time;
PQ determination	means a price-quality determination made under s 170 of the Act in respect of a regulatory period ;
prescribed investor rate	has the same meaning as defined in the Income Tax Act 2007;
programme	means a group of related projects with a common purpose;
project	means a temporary endeavour requiring concerted effort, undertaken to create a defined outcome;
proposed capex	means capital expenditure that is part of a capex proposal ;
provisioning	means the process by which a regulated provider connects an end-user or access seeker to the fibre network and includes installing, activating or modifying a regulated FFLAS connection;
proxy asset allocator	means a proportion of a quantifiable measure- (a) used to allocate asset values for which a causal relationship cannot be established; and (b) whose quantum is based on factors in existence during the 12-month period terminating on the last day of the most

recent **disclosure year** or **financial loss year** in respect of which the proxy allocation is carried out,

which in each case-

- (c) is consistent with similar measures, both within a **disclosure year** or **financial loss year** and from year to year; and
- (d) is objectively justifiable and demonstrably reasonable;

proxy cost allocator

means a proportion of a quantifiable measure-

- (a) used to allocate **operating costs** for which a **causal relationship** cannot be established; and
- (b) whose quantum is based on factors in existence during the 12-month period terminating on the last day of the most recent **disclosure year** or **financial loss year** in respect of which the cost allocation is carried out,

which in each case-

- (c) is consistent with similar measures, both within a **disclosure year** or **financial loss year** and from year to year; and
- (d) is objectively justifiable and demonstrably reasonable,

and, includes the following default allocators:

- (e) number of customers, **end-users**, or premises (intact, connected or passed);
- (f) number of ports;
- (g) revenue;
- (h) central office space;
- (i) peak traffic; and
- (j) average traffic;

public notice

has the same meaning as defined in s 6 of the **Act**;

Q

qualifying debt

has, for the purpose of:

- (a) Part 2, the meaning specified in clause 2.4.6(1); and

	(b) Part 3, the meaning specified in clause 3.4.8(1);
qualifying issuer	means a New Zealand resident limited liability company that- <ul style="list-style-type: none"> (a) undertakes the majority of its business activities in Australia and New Zealand; or (b) is part of a corporate group that undertakes the majority of its business activities in Australia and New Zealand; and- (c) does not operate predominantly in the banking or finance industries; or (d) is part of a corporate group that does not operate predominantly in the banking or finance industries; and (e) that issues vanilla NZ\$ denominated bonds that are publicly traded;
qualifying provider	has, for the purpose of: <ul style="list-style-type: none"> (a) Part 2, the meaning specified in clause 2.4.6(2); and (b) Part 3, the meaning specified in clause 3.4.8(2);
qualifying rating	means- <ul style="list-style-type: none"> (a) a Standard and Poor’s long-term credit rating of the specified grade; or (b) an equivalent long-term credit rating of another internationally recognised rating agency;
quality dimensions	has the same meaning as defined in s 164(1) of the Act ;
R	
recoverable cost	has the meaning specified in clause [Regulatory Processes and Rules];
regulated FFLAS	means all FFLAS provided by a regulated provider over a fibre network that is subject to regulations under section 226 of the Act ;

regulated fibre service provider	has the same meaning as ‘regulated fibre service provider’ as defined in s 5 of the Act ;
regulated goods or services	has the same meaning as defined in s 52C of the Commerce Act 1986;
regulated provider	(a) for the purpose of Part 2, means a person who is prescribed in regulations made under s 226 as being subject to information disclosure regulation; and (b) for the purpose of Part 3, means a person who is prescribed in regulations made under s 226 as being subject to price-quality regulation;
regulatory net taxable income	has the meaning in clause 2.3.1(2);
regulatory period	means the relevant regulatory period for price-quality regulation applicable to a regulated provider as notified in a PQ determination ;
regulatory period term	means a period of time in years that matches the length of the current regulatory period , but which may commence at a different time to the current regulatory period ;
regulatory profit / (loss) before tax	has, for the purpose of: (a) Part 2, the meaning specified in clause 2.3.1(5); and (b) Part 3, the meaning specified in clause 3.3.1(4);
regulatory tax asset value	has the meaning in clause 2.3.2(1);
regulatory taxable income	has the meaning in clause 2.3.1(3);
regulatory template	means tables of information requirements regarding Chorus’ base capex and connection capex as agreed under clauses 3.6.7(4) and 3.6.13(4) or as specified under clauses 3.6.7(5) and 3.6.13(5);
regulatory year	means a 12-month period ending on the date specified in a PQ determination ;
related party	means-

- (a) a person that is related to the **regulated provider**, where the **regulated provider** would be considered as the ‘reporting entity’ as specified in the definition of ‘related party’ in **NZ IAS 24**; or
- (b) any part of the **regulated provider** that does not provide **regulated FFLAS** or **UFB FFLAS**;

related party transaction

means-

- (a) the procurement of a **core fibre asset** or good or service from a **related party** by the part of the **regulated provider** that provides **regulated FFLAS**;
- (b) the procurement of a **UFB asset** or good or service from a **related party** by the part of the **regulated provider** that provides **UFB FFLAS**;
- (c) the sale or supply of a **core fibre asset** or good or service to a **related party** by the part of the **regulated provider** that provides **regulated FFLAS**; or
- (d) the sale or supply of a **UFB asset** or good or service to a **related party** by the part of the **regulated provider** that provides **UFB FFLAS**;

remaining asset life

means the term remaining of the **fibre asset’s asset life** at the commencement of the **disclosure year** in question;

restore

means when an **end-user’s regulated FFLAS** functions again following a **fault**;

result of asset allocation ratio

means-

- (a) where **regulatory tax asset value** is determined at **implementation date** or thereafter, has the meaning in clause 2.3.2(4); and
- (b) where **regulatory tax asset value** is determined in the **financial loss period**, has the meaning in clause 2.3.2(5);

revaluation means the amount, which may be a negative number-

- (a) determined, for the purpose of Part 2, in accordance with clause 2.2.10(2); and
- (b) determined, for the purpose of Part 3, in accordance with clause 3.2.1(3);

revaluation rate means the amount specified in clause 2.2.10(4);

right-of-use asset has the same meaning as under **GAAP** except that it excludes any part of the cost of that asset that is a **pass-through cost** or **recoverable cost**;

S

sale adjustment has the meaning specified in clause 2.2.5(4);

sale adjustment value has the meaning specified in clause 2.2.5(6);

second regulatory period means the **regulatory period** that starts on 1 January 2025, where the duration of this **regulatory period** must be determined by the **Commission**;

services that are not regulated FFLAS means

- (a) **telecommunications services that are not regulated FFLAS**;
- (b) any **Part 4 regulated service**; or
- (c) any service that is not regulated under Part 6 of the **Act** or Part 4 of the Commerce Act 1986;

services that are not UFB FFLAS means

- (a) **telecommunications services that are not UFB FFLAS**;
- (b) any **Part 4 regulated service**; or
- (c) any service that is not regulated under Part 6 of the **Act** or Part 4 of the Commerce Act 1986;

sold asset means a **fibre asset** that, in the **disclosure year** in question, has been sold;

standard error means estimated standard deviation;

sum of disposed assets	<ul style="list-style-type: none"> (a) in respect of financial loss year 2012, has the meaning specified in clause 2.2.3(27)(g); and (b) in respect of financial loss year 2013 and a financial loss year thereafter, has the meaning specified in clause 2.2.3(27)(h);
sum of value of commissioned assets	<ul style="list-style-type: none"> (a) in respect of financial loss year 2012, has the meaning specified in clause 2.2.3(27)(e); and (b) in respect of financial loss year 2013 and a financial loss year thereafter, has the meaning specified in clause 2.2.3(27)(f);
switching	means the process by which a regulated provider changes an end-users' regulated FFLAS connection from one access seeker to another access seeker and includes disconnections;
T	
tax asset value	has the meaning in clause 2.3.2(2);
tax costs	has the meaning in clause 2.3.4(1);
tax depreciation rules	means the tax rules that relate to the determination of depreciation allowances for tax purposes;
tax effect	means the product of multiplication by the corporate tax rate ;
tax rules	means the rules applicable to a regulated provider for determining income tax payable under the Income Tax Act 2007;
telecommunications service	has the same meaning as defined in s 5 of the Act ;
telecommunications service provider	means an entity where a majority of its business relates to providing telecommunications services;

telecommunications services that are not regulated FFLAS	means any telecommunications service provided by a regulated provider that is not regulated FFLAS ;
telecommunications services that are not UFB FFLAS	means any telecommunications service provided by a regulated provider that is not UFB FFLAS ;
term credit spread difference	means the amount determined: <ul style="list-style-type: none"> (a) for the purpose of Part 2, in accordance with clause 2.4.7(1); and (b) for the purpose of Part 3, in accordance with clause 3.4.9(1);
term credit spread differential	means the amount determined: <ul style="list-style-type: none"> (a) for the purpose of Part 2, in accordance with clause 2.4.8(3); (b) for the purpose of Part 3, in accordance with clause 3.4.10(1);
term credit spread differential allowance	for the purpose of- <ul style="list-style-type: none"> (a) Part 2, means the sum of term credit spread differentials; (b) Part 3, in respect of the first regulatory period, means the amount determined in accordance with clause 3.4.7(2); and (c) Part 3, in respect of the second regulatory period and subsequent regulatory periods, means the amount determined in accordance with clause 3.4.7(3);

U

UFB asset	means an asset that is: <ul style="list-style-type: none"> (a) constructed or acquired by a regulated provider; and (b) employed in the provision of UFB FFLAS (whether or not the asset is also employed in the provision of other services), and excludes- <ul style="list-style-type: none"> (i) intangible assets, unless they are-
------------------	---

- A. **finance leases**; or
 - B. **identifiable non-monetary assets** whose costs do not include (wholly or partly) **pass-through costs** or **recoverable costs**; and
- (ii) **works under construction**;

UFB asset initial value	means, in respect of a UFB asset , the value allocated to the provision of UFB FFLAS as a result of: <ul style="list-style-type: none"> (a) adopting the UFB asset’s unallocated UFB asset initial value; and (b) applying clause 2.2.3(27)(b) to the unallocated UFB asset initial value;
UFB costs	has the meaning specified in clause 2.2.3(25);
UFB FFLAS	means any FFLAS provided by a regulated provider over a fibre network under the UFB initiative in accordance with s 177(2) of the Act , and for the avoidance of doubt, excludes any FFLAS that is regulated FFLAS ;
UFB initiative	has the same meaning as defined in s 5 of the Act ;
UFB revenues	has the meaning specified in clause 2.2.3(25);
unallocated closing RAB value	means the value determined in respect of a core fibre asset , in accordance with clause 2.2.4(2);
unallocated depreciation	means an allowance to account for the diminution in a fibre asset’s remaining service life potential in the disclosure year in question with respect to its unallocated opening RAB value and the amount of such allowance is determined in respect of a fibre asset : <ul style="list-style-type: none"> (a) for regulated providers subject only to information disclosure regulation in regulations made under s 226 of the Act, in accordance with clause 2.2.6(2); and

- (b) for **regulated providers** subject to both information disclosure regulation and price-quality regulation in regulations made under s 226 of the **Act**, in accordance with clause 2.2.7(2):

unallocated initial RAB value	means the value of a core fibre asset in the initial RAB determined in accordance with clause 2.2.2(1);
unallocated opening RAB value	means the value determined in respect of a core fibre asset , in accordance with clause 2.2.4(1);
unallocated revaluation	means the amount determined in accordance with clause 2.2.10(1);
unallocated UFB asset initial value	means, in respect of a UFB asset , the value calculated for a UFB asset under clause 2.2.3(27)(a);
unrecovered returns on investment	has the meaning specified in clause 2.2.3(25);
utilised tax losses	means the amount determined in accordance with clause 2.3.3(1);

V

value of commissioned asset	means the value: <ul style="list-style-type: none">(a) determined, for the purpose of Part 2, in accordance with clause 2.2.12(1); and(b) determined, for the purpose of Part 3, in accordance with clause 3.2.1(3);
valuer	means an individual who- <ul style="list-style-type: none">(a) is registered as a valuer under the Valuers Act 1948;(b) holds a current practising certificate issued by-<ul style="list-style-type: none">(i) the Property Institute of New Zealand; or(ii) the New Zealand Institute of Valuers;

- (c) has been engaged to act in their professional capacity as a valuer; and
- (d) is **independent**;

vanilla NZ\$ denominated bonds means senior unsecured nominal debt obligations denominated in New Zealand dollars without callable, puttable, conversion, profit participation, credit enhancement or collateral features;

vested asset means a **core fibre asset** or **UFB asset** associated with the provision of **regulated FFLAS** or **UFB FFLAS**, received by a **regulated provider**-

- (a) without provision of consideration; or
- (b) with provision of nominal consideration;

W

WACC means weighted average cost of capital;

working day has the same meaning as defined in s 5 of the **Act**; and

works under construction means an asset, or a collection of assets that-

- (a) has been, is being or is forecast to be constructed by, or on behalf of, a **regulated provider**;
- (b) has not been **commissioned**; and
- (c) the **regulated provider** intends to **commission**.

PART 2 INPUT METHODOLOGIES FOR INFORMATION DISCLOSURE

SUBPART 1 Cost allocation

2.1.1 Allocation between regulated FFLAS and services that are not regulated FFLAS

- (1) Any-
 - (a) **operating costs**; and
 - (b) **asset values**,that are **directly attributable** to the provision of **regulated FFLAS** by the **regulated provider** must be allocated to **regulated FFLAS**.
- (2) The following must not be allocated to **regulated FFLAS**:
 - (a) any **operating cost** that is **directly attributable** to the provision of **services that are not regulated FFLAS**; or
 - (b) any **asset value** that is **directly attributable** to the provision of **services that are not regulated FFLAS**.
- (3) **ABAA** must be applied when any of the following are allocated:
 - (a) **operating costs** that are not **directly attributable** to **regulated FFLAS** or **services that are not regulated FFLAS**; and
 - (b) **asset values** that are not **directly attributable** to **regulated FFLAS** or **services that are not regulated FFLAS**.

2.1.2 Accounting-based allocation approach (ABAA)

- (1) **Cost allocators** must be used to allocate **operating costs** not **directly attributable** to either-
 - (a) **regulated FFLAS**; or
 - (b) **services that are not regulated FFLAS**.
- (2) **Asset allocators** must be used to allocate **asset values** not **directly attributable** to either-
 - (a) **regulated FFLAS**; or
 - (b) **services that are not regulated FFLAS**.
- (3) Where a **regulated provider** uses a **proxy cost allocator** for the purposes of subclause (1) or a **proxy asset allocator** for the purposes of subclause (2), the **regulated provider** must, in accordance with the requirements in the relevant **ID determination**, explain-
 - (a) why a **causal relationship** cannot be established; and

- (b) the rationale for the quantifiable measure used for the **proxy cost allocator** or **proxy asset allocator**.
- (4) A **regulated provider** must:
- (a) update the **allocator metrics** it uses to apply **ABAA** no less than once every 12 months; and
 - (b) review its choice of **allocator types** for **cost allocators, proxy cost allocators, asset allocators** and **proxy asset allocators** no less than once every 18 months.
- (5) Any allocation performed under this clause must comply with the constraints set out in clause 2.1.3.

2.1.3 Allocation constraints for ABAA

- (1) For the purposes of establishing an **initial RAB**, a **regulated provider** must apply the same **allocator types** as those used to determine the **financial loss asset** in accordance with clause 2.1.4.
- (2) Any **operating costs** or **asset values** that are **directly attributable** to and recovered under **Part 4 regulated services** must not be allocated to **regulated FFLAS**.
- (3) A **regulated provider** must apply the same cost allocation approach as used in Subpart 1 of Part 3 when the actual expenditure is reported, unless-
 - (a) there is a demonstrably justifiable reason to use an alternative **allocator type**, where the requirements of satisfying that alternative approach are specified in an **ID determination**; or
 - (b) it uses an **allocator type** that is comparable, in all material respects, to the **allocator type** used in Subpart 1 of Part 3.
- (4) The allocation of common costs to **regulated FFLAS** must not be higher than the unavoidable costs that would be incurred if the **regulated provider** were to cease supplying **services that are not regulated FFLAS**.

2.1.4 Allocation methodology for determining financial loss asset

- (1) For the purposes of allocating 'operating expenditure' to the provision of **UFB FFLAS** under clause 2.2.3(27) for a **financial loss year** in the **financial loss period**-
 - (a) the 'operating expenditure' in question shall be considered '**operating costs** incurred under the **UFB initiative**';
 - (b) any '**operating cost** incurred under the **UFB initiative**', as specified in subclause (1)(a), that is solely incurred during the **financial loss period** in the provision of **UFB FFLAS** must be allocated to **UFB FFLAS**;

- (c) any **‘operating cost** incurred under the **UFB initiative**’, as specified in subclause (1)(a), that is not solely incurred in the provision of **UFB FFLAS** must be allocated to **UFB FFLAS** by applying **ABAA**, where:
 - (i) references to **“regulated FFLAS”** are modified to read **“UFB FFLAS”**; and
 - (ii) references to **“services that are not regulated FFLAS”** are modified to read **“services that are not UFB FFLAS”**;
 - (d) the **allocator types** available to be applied to allocate **operating costs** not solely incurred in the provision of **UFB FFLAS** include the following:
 - (i) number of customers, **end-users**, or premises (intact, connected or passed);
 - (ii) number of ports;
 - (iii) revenue;
 - (iv) central office space;
 - (v) peak traffic; and
 - (vi) average traffic.
- (2) For the purposes of allocating an ‘unallocated UFB asset initial value’ to the provision of **UFB FFLAS** under clause 2.2.3(27) for a **financial loss year** in the **financial loss period**-
- (a) the ‘unallocated UFB asset initial value’ in question, less all depreciation under **GAAP** in prior **financial loss years** of the **financial loss period** relating to that **UFB asset**, shall be considered an ‘asset value’; and
 - (b) the **allocator types** available to be applied using **ABAA** include the following:
 - (i) number of customers, **end-users**, or premises (intact, connected or passed);
 - (ii) number of ports;
 - (iii) revenue;
 - (iv) central office space;
 - (v) peak traffic; and
 - (vi) average traffic,

where references to **“regulated FFLAS”** are modified to read **“UFB FFLAS”**; and references to **“services that are not regulated FFLAS”** are modified to read **“services that are not UFB FFLAS”**.

- (3) The **allocator types** specified in subclauses (1)(d) and 2(b) must be applied using **allocator metrics** that are updated for each **financial loss year** (or part **financial loss year**) of the **financial loss period**.

2.1.5 Costs or values in respect of regulated FFLAS

- (1) Subject to subclause (2), a **regulated provider** must, in accordance with the requirements in the relevant **ID determination**, identify-
- (a) **operating costs** that are **directly attributable** to **regulated FFLAS**;
 - (b) **asset values** that are **directly attributable** to **regulated FFLAS**;
 - (c) **operating costs** which are not **directly attributable** to **regulated FFLAS**, but are incurred in the provision of such **regulated FFLAS**; and
 - (d) **asset values** which are not **directly attributable** to **regulated FFLAS** but relate to **fibre assets** that are employed in the provision of such **regulated FFLAS**.
- (2) As required under an **ID determination**, a **regulated provider** must specify the **operating costs** and **asset values** in subclause (1) in terms of one or more of:
- (a) **FFLAS product families**;
 - (b) geographic coverage; or
 - (c) level of **fibre network** functionality or other functionality.

SUBPART 2 **Asset valuation**

2.2.1 Composition of initial RAB

- (1) 'Initial RAB' for a **regulated provider** means the total number of **fibre assets** as at the **implementation date**.

2.2.2 Initial RAB values of core fibre assets

- (1) The 'unallocated initial RAB value' of a **core fibre asset** as at the **implementation date** is calculated in accordance with s 177(1) of the **Act**.
- (2) The 'initial RAB value' of a **core fibre asset** as at the **implementation date** is the **unallocated initial RAB value** allocated to **regulated FFLAS** as a result of-
- (a) adopting its **unallocated initial RAB value**; and
 - (b) applying clause 2.1.1 to it.

2.2.3 Initial RAB value of financial loss asset

- (1) The 'initial RAB value' of the **financial loss asset** for a **regulated provider** is equal to the **accumulated unrecovered returns** determined in accordance with s 177(2) and (3) of the **Act**.

- (2) For the purpose of subclause (1), where the **accumulated unrecovered returns** in the **financial loss period** for a **regulated provider** are nil, the **initial RAB value** of the **financial loss asset** for a **regulated provider** will be determined by the **Commission** as nil.
- (3) ‘Accumulated unrecovered returns’ are calculated in accordance with the formula:
- compounded unrecovered return for financial loss year 2012**
 - + compounded unrecovered return for financial loss year 2013**
 - + compounded unrecovered return for financial loss year 2014**
 - + compounded unrecovered return for financial loss year 2015**
 - + compounded unrecovered return for financial loss year 2016**
 - + compounded unrecovered return for financial loss year 2017**
 - + compounded unrecovered return for financial loss year 2018**
 - + compounded unrecovered return for financial loss year 2019**
 - + compounded unrecovered return for financial loss year 2020**
 - + compounded unrecovered return for financial loss year 2021**
 - + unrecovered returns on investment for financial loss year 2022**
- (4) ‘Compounded unrecovered return for financial loss year 2012’ means the **compounding factor for financial loss year 2012** multiplied by the **unrecovered returns on investment** for **financial loss year 2012**.
- (5) ‘Compounded unrecovered return for financial loss year 2013’ means the **compounding factor for financial loss year 2013** multiplied by the **unrecovered returns on investment** for **financial loss year 2013**.
- (6) ‘Compounded unrecovered return for financial loss year 2014’ means the **compounding factor for financial loss year 2014** multiplied by the **unrecovered returns on investment** for **financial loss year 2014**.
- (7) ‘Compounded unrecovered return for financial loss year 2015’ means the **compounding factor for financial loss year 2015** multiplied by the **unrecovered returns on investment** for **financial loss year 2015**.
- (8) ‘Compounded unrecovered return for financial loss year 2016’ means the **compounding factor for financial loss year 2016** multiplied by the **unrecovered returns on investment** for **financial loss year 2016**.
- (9) ‘Compounded unrecovered return for financial loss year 2017’ means the **compounding factor for financial loss year 2017** multiplied by the **unrecovered returns on investment** for **financial loss year 2017**.

- (10) ‘Compounded unrecovered return for financial loss year 2018’ means the **compounding factor for financial loss year 2018** multiplied by the **unrecovered returns on investment for financial loss year 2018**.
- (11) ‘Compounded unrecovered return for financial loss year 2019’ means the **compounding factor for financial loss year 2019** multiplied by the **unrecovered returns on investment for financial loss year 2019**.
- (12) ‘Compounded unrecovered return for financial loss year 2020’ means the **compounding factor for financial loss year 2020** multiplied by the **unrecovered returns on investment for financial loss year 2020**.
- (13) ‘Compounded unrecovered return for financial loss year 2021’ means the **compounding factor for financial loss year 2021** multiplied by the **unrecovered returns on investment for financial loss year 2021**.
- (14) ‘Compounding factor for financial loss year 2012’ means **compounding factor for financial loss year 2013 X 30 June 2012 WACC**.
- (15) ‘Compounding factor for financial loss year 2013’ means **compounding factor for financial loss year 2014 X 30 June 2013 WACC**.
- (16) ‘Compounding factor for financial loss year 2014’ means **compounding factor for financial loss year 2015 X 30 June 2014 WACC**.
- (17) ‘Compounding factor for financial loss year 2015’ means **compounding factor for financial loss year 2016 X 30 June 2015 WACC**.
- (18) ‘Compounding factor for financial loss year 2016’ means **compounding factor for financial loss year 2017 X 30 June 2016 WACC**.
- (19) ‘Compounding factor for financial loss year 2017’ means **compounding factor for financial loss year 2018 X 30 June 2017 WACC**.
- (20) ‘Compounding factor for financial loss year 2018’ means **compounding factor for financial loss year 2019 X 30 June 2018 WACC**.
- (21) ‘Compounding factor for financial loss year 2019’ means **compounding factor for financial loss year 2020 X 30 June 2019 WACC**.
- (22) ‘Compounding factor for financial loss year 2020’ means **compounding factor for financial loss year 2021 X 30 June 2020 WACC**.
- (23) ‘Compounding factor for financial loss year 2021’ means **compounding factor for financial loss year 2022 X 30 June 2021 WACC**.
- (24) ‘Compounding factor for financial loss year 2022’ means 1.
- (25) For the purposes of subclauses (4)-(13), ‘unrecovered returns on investment’ for each **financial loss year** (or part **financial loss year**) are determined in accordance with the formula-

$$UFB\ revenues \times TF_{rev} - UFB\ costs + avoided\ financing\ cost\ building\ block$$

where-

'UFB revenues' means revenues derived by a **regulated provider** from **UFB FFLAS** for the **financial loss year** in question, excluding any **capital contributions**;

'TF_{rev}' is determined in accordance with the formula-

$$(1 + \text{cost of capital})^{148/365}$$

'UFB costs' means a **regulated provider's** costs under the **UFB initiative** for the **financial loss year** in question and is determined in accordance with subclause (27), where certain inputs used to calculate these costs must be multiplied by the cash flow timing assumptions specified in accordance with subclause (26); and

'Avoided financing cost building block' means the avoided financing cost on the concessionary Crown financing for the **financial loss year** in question:

- (a) calculated, where **Crown financing** is provided by way of debt, in accordance with the formula-

$$Cf \times dr$$

where-

Cf means the **Crown financing** amount; and

dr means the avoided cost debt rate that takes into account the actual **qualifying rating** of the **regulated provider**, as determined by the **Commission**;

- (b) calculated, where **Crown financing** is provided by way of equity, in accordance with the formula-

$$Cf \times er$$

where-

Cf means the **Crown financing** amount; and

er means the avoided cost equity rate, as determined by the **Commission**;

- (c) calculated, where **Crown financing** is provided by way of a combination of debt and equity, as the sum of the amounts in paragraph (a) and (b), as determined by the **Commission**,

where the nature of the **Crown financing** (whether paragraph (a), (b), or (c) applies) is a matter for the **Commission** to determine.

- (26) For the purpose of determining a **regulated provider's** 'UFB costs', for each **financial loss year** (or part **financial loss year**), the following inputs must be multiplied by the following cash flow timing assumptions:

- (a) in respect of the **sum of value of commissioned assets**, multiplied by (TF_{VCA}-1)
- (b) in respect of **operating expenditure**, multiplied by (TF); and

- (c) in respect of **tax costs**, multiplied by (TF) ,
 where:
- (d) 'TF' is determined in accordance with the formula –
 $(1 + \text{cost of capital})^{182/365}$
- (e) 'TFvca' is determined in accordance with the formula-
 $PVvca \times (1 + \text{cost of capital}) \div \text{sum of value of commissioned assets}$; and
- (f) 'PVvca' means the sum of the present value of **closing UFB asset values** for **commissioned** assets, where each present value is determined by discounting each **closing UFB asset value** by the **cost of capital** from the relevant **commissioning date** to the commencement of the relevant **financial loss year**.

- (27) For the purposes of subclause (25), a **regulated provider's** 'UFB costs' are determined for each **financial loss year** (or part **financial loss year**) in accordance with the formula-

$$(\textit{opening UFB asset base value} \times \textit{cost of capital}) + \textit{operating expenditure} + \textit{tax costs} + \textit{depreciation}$$

where-

opening UFB asset base value means, as of 1 December 2011, the sum of the **UFB asset initial values** of all **UFB assets** employed to provide **UFB FFLAS** for the **financial loss year**, where-

- (a) the 'unallocated UFB asset initial value' of a **UFB asset** is calculated by-
- (i) taking the cost incurred by a **regulated provider** in constructing or acquiring the **UFB asset**, net of **capital contributions**; or
- (ii) if the **UFB asset** was owned by **Chorus** before 1 December 2011, taking the cost recorded by **Chorus** for the **UFB asset** in its published general purpose financial statements as of 1 December 2011; and
- (iii) adjusting that cost for accumulated depreciation and impairment losses (if any) recognised by the **regulated provider** (ignoring any adjustment for **Crown financing**), as at the first day of the **financial loss year**, under **GAAP**;
- (b) each 'unallocated UFB asset initial value' is allocated to the provision of **FFLAS** under the **UFB initiative** by applying clause 2.1.4(2);

opening UFB asset base value means, in respect of **financial loss year** 2013 and a **financial loss year** thereafter, the **closing UFB asset base value** in the preceding **financial loss year**, where each 'unallocated UFB asset initial value' is allocated to the provision of **FFLAS** under the **UFB initiative** by applying clause 2.1.4(2);

closing UFB asset base value means, in respect of **financial loss year 2012**, the amount calculated in accordance with the following formula:

opening UFB asset base value as of 1 December 2011
+ the **sum of value of commissioned assets**
-**sum of disposed assets**
+ *depreciation*;

closing UFB asset base value means, in respect of **financial loss year 2013** and a **financial loss year** thereafter, the amount calculated in accordance with the following formula:

opening UFB asset base value for the **financial loss year**
+ the **sum of value of commissioned assets**
- **sum of disposed assets**
+ *depreciation*;

depreciation means:

- (c) in respect of **financial loss year 2012**, depreciation and impairment losses recognised by the **regulated provider** (ignoring any accounting adjustment for **Crown financing**) under **GAAP** for the period from 1 December 2011 and ending on the close of the day immediately before the start of **financial loss year 2013**; and
- (d) in respect of **financial loss year 2013** and a **financial loss year** thereafter, depreciation and impairment losses recognised by the **regulated provider** (ignoring any accounting adjustment for **Crown financing**) under **GAAP** during the **financial loss year**;

operating expenditure means **operating costs** incurred under the **UFB initiative** for the **financial loss year**, allocated to the provision of **UFB FFLAS** by applying clause 2.1.4(1); and

sum of value of commissioned assets means:

- (e) in respect of **financial loss year 2012**, the sum of the **value of commissioned assets** which were **commissioned** for the period from 1 December 2011 and ending on the close of the day immediately before the start of **financial loss year 2013**; and
- (f) in respect of **financial loss year 2013** and a **financial loss year** thereafter, the sum of the **value of commissioned assets** which were **commissioned** during the **financial loss year**;

sum of disposed assets means:

- (g) in respect of **financial loss year 2012**, in relation to **disposed assets**, the sum of the value of all **UFB assets** that were sold, transferred, or irrecoverably removed from the **regulated provider's** possession without consent for the period from 1 December 2011 and ending on the close of the day immediately before the start of **financial loss year 2013**; and
- (h) in respect of **financial loss year 2013** and a **financial loss year** thereafter, in relation to **disposed assets**, the sum of the value of all **UFB assets** that were sold, transferred, or irrecoverably removed from the **regulated provider's** possession without consent during the **financial loss year**.

2.2.4 RAB roll forward of core fibre assets

- (1) 'Unallocated opening RAB value' in respect of a **core fibre asset** in relation to-
 - (a) the **disclosure year 2022**, is the **core fibre asset's unallocated initial RAB value**; and
 - (b) a **disclosure year** thereafter, is the **core fibre asset's unallocated closing RAB value** in the preceding **disclosure year**.
- (2) 'Unallocated closing RAB value' in respect of a **core fibre asset** means, in the case of-
 - (a) a **disposed asset**, nil;
 - (b) a **core fibre asset** with a **commissioning date** in the **disclosure year** in question, its **value of commissioned asset**; and
 - (c) any other **core fibre asset** with an **unallocated opening RAB value**, the value determined in accordance with the formula-

$$\textit{unallocated opening RAB value} - \textit{unallocated depreciation} + \textit{unallocated revaluation}.$$
- (3) 'Opening RAB value' in respect of a **core fibre asset** in relation to-
 - (a) the **disclosure year 2022**, is the **core fibre asset's initial RAB value**; and
 - (b) a **disclosure year** thereafter, is the **core fibre asset's closing RAB value** in the preceding **disclosure year**.
- (4) 'Closing RAB value', in respect of a **core fibre asset**, is the value allocated to **regulated FFLAS** as a result of-
 - (a) adopting the **core fibre asset's unallocated closing RAB value**; and
 - (b) applying clause 2.1.1 to the **core fibre asset**.
- (5) 'Closing RAB value', in respect of a **partly deregulated asset**, is the value specified in subclause (4).

2.2.5 RAB roll forward of financial loss asset

- (1) 'Opening RAB value' in respect of the **financial loss asset** in relation to-

- (a) the **disclosure year 2022**, is the **financial loss asset’s initial RAB value**;
and
 - (b) a **disclosure year** thereafter, is the **financial loss asset’s closing RAB value** in the preceding **disclosure year** less the values resulting from the **deregulation adjustment** and the **sale adjustment**.
- (2) ‘Closing RAB value’ in respect of the **financial loss asset** means the value determined in accordance with the formula-

$$\textit{opening RAB value} - \textit{depreciation} + \textit{revaluation}$$

- (3) For the purposes of subclause (1), the value of the **financial loss asset** must be adjusted commensurate with the value of a ‘deregulation adjustment’, where a ‘deregulation adjustment’ must be calculated in accordance with the formula-

$$\frac{DAVsum}{CVICFAB}$$

where:

DAVsum is the sum of all **deregulated asset values** and **partly deregulated asset values** for the **disclosure year**, as determined by the **Commission** following deregulation of a service under s 226 of the **Act**; and

CVICFAB is the **current value of initial core fibre asset base**.

- (4) For the purposes of subclause (1), the value of the **financial loss asset** must be adjusted commensurate with the value of a ‘sale adjustment’, where a ‘sale adjustment’ must be calculated in respect of a **financial loss asset** for a **disclosure year** in accordance with the formula-

$$\frac{SAVsum}{CVICFAB}$$

where:

SAVsum is the sum of all **sale adjustment values** for the **disclosure year** for **sold assets**; and

CVICFAB is the **current value of initial core fibre asset base**.

- (5) For the purpose of subclause (4), where the purchaser is a **regulated provider** or **Part 4 regulated supplier**, it may adjust the value of its regulatory asset base commensurate with the adjustment made to the seller’s **financial loss asset**.
- (6) ‘Sale adjustment value’ means the **opening RAB value** for the asset in the **disclosure year** in which the asset was sold.
- (7) ‘Current value of initial core fibre asset base’ means the amount determined in accordance with the formula:

initial value of core fibre asset base

- the sum of **depreciation** for all current **core fibre assets** since the **implementation date**
- + the sum of **revaluations** for all current **core fibre assets** since the **implementation date**
- the sum of the value for all **disposed assets** since the **implementation date**
- the sum of all **deregulated asset values** and **partly deregulated asset values** since the **implementation date**.

- (8) 'Initial value of core fibre asset base' means the sum of the **initial RAB values** for each **core fibre asset** in the **initial RAB**.

2.2.6 Depreciation for regulated providers subject only to information disclosure regulation

- (1) **Regulated providers** subject only to information disclosure regulation in regulations made under s 226 of the **Act** must apply a depreciation method consistent with the time profile of revenue recovery it applies at the time of a disclosure.
- (2) For the purpose of subclause (1), and subject to clause 2.2.8, in the case of a **fibre asset** with an **unallocated opening RAB value**, 'unallocated depreciation' must be determined consistently with the time profile of revenue recovery that the **regulated provider** applies at the time of a disclosure in accordance with an **ID determination**, which may be either:
- (a) a depreciation method consistent with **GAAP**; or
 - (b) an alternative method.
- (3) For the purpose of subclause (1), in the case of a **fibre asset** with an **opening RAB value**, 'depreciation' must be determined consistently with the time profile of revenue recovery that the **regulated provider** applies at the time of a disclosure, which may be either:
- (a) a depreciation method consistent with **GAAP**; or
 - (b) an alternative method.
- (4) For the purposes of subclauses (2) and (3)-
- (a) 'unallocated depreciation' and 'depreciation' are nil in the case of-
 - (i) **land**; and
 - (ii) an **easement** other than a **fixed life easement**; and
 - (b) in all other cases, where the **fibre asset's remaining asset life** at the end of the **disclosure year** is nil-
 - (i) 'unallocated depreciation' is the **fibre asset's unallocated opening RAB value**; and
 - (ii) 'depreciation' is the **fibre asset's opening RAB value**.

2.2.7 Depreciation for regulated providers subject to both information disclosure regulation and price-quality regulation

- (1) In respect of **regulated providers** subject to both information disclosure regulation and price-quality regulation in regulations made under s 226 of the **Act**, ‘unallocated depreciation’ and ‘depreciation’ are determined in accordance with subclauses (2)-(3).
- (2) For the purpose of subclause (1), in the case of a **fibre asset** with an **unallocated opening RAB value**, a **regulated provider** must determine ‘unallocated depreciation’ using a depreciation method consistent with **GAAP**, unless:
 - (a) an alternative depreciation method is applied for some or all **fibre assets** in accordance with clause 3.2.2(5); or
 - (b) a different depreciation method is applied for some or all **fibre assets** in accordance with clause 3.2.2(6).
- (3) For the purpose of subclause (1), in the case of a **fibre asset** with an **opening RAB value**, a **regulated provider** must determine ‘depreciation’ using a depreciation method consistent with **GAAP**, unless:
 - (a) an alternative depreciation method is applied for some or all **fibre assets** in accordance with clause 3.2.2(5); or
 - (b) a different depreciation method is applied for some or all **fibre assets** in accordance with clause 3.2.2(6).
- (4) For the purposes of subclauses (2) and (3)-
 - (a) ‘unallocated depreciation’ and ‘depreciation’ are nil in the case of-
 - (i) **land**; and
 - (ii) an **easement** other than a **fixed life easement**; and
 - (b) in all other cases, where the **fibre asset’s remaining asset life** at the end of the **disclosure year** is nil-
 - (i) ‘unallocated depreciation’ is the **fibre asset’s unallocated opening RAB value**; and
 - (ii) ‘depreciation’ is the **fibre asset’s opening RAB value**.
- (5) A **regulated provider** subject to both information disclosure regulation and price-quality regulation in regulations made under s 226 of the **Act** must apply the depreciation method applicable for the current **regulatory period** in a **PQ determination** when disclosing information in accordance with an **ID determination** for that **regulatory period**.

2.2.8 Unallocated depreciation constraint

- (1) For the purposes of clause 2.2.6(1), the sum of **unallocated depreciation** calculated for a **fibre asset** over its **asset life** must not exceed the sum of-
- (a) all **unallocated revaluations** applying to that asset in all **disclosure years**;
and
 - (b) in the case of a **fibre asset**-
 - (i) in the **initial RAB**, the **fibre asset's unallocated initial RAB value**; or
 - (ii) not in the **initial RAB**, the **fibre asset's value of commissioned asset**,
- less-
- (c) the **fibre asset's unallocated opening RAB value** in the **disclosure year** in which it becomes a **deregulated asset**.

2.2.9 Asset life

- (1) 'Asset life' means, in the case of-
- (a) a **fixed life easement**, the fixed duration or fixed period (as the case may be) referred to in the definition of **fixed life easement**;
 - (b) a **dedicated asset**, the duration of the fixed term agreement for the provision of **regulated FFLAS** between the **regulated provider** and customer;
 - (c) a **right-of-use asset**, its asset life determined under **GAAP**;
 - (d) all other **fibre assets**, the asset life adopted by the **regulated provider** under **GAAP**.

2.2.10 Revaluation

- (1) Subject to subclause (3), 'unallocated revaluation' in respect of a **fibre asset** is the amount determined in accordance with the formula-

$$\textit{unallocated opening RAB value} \times \textit{revaluation rate}$$

- (2) Subject to subclause (3), 'revaluation' in respect of a **fibre asset** is the amount determined in accordance with the formula-

$$\textit{opening RAB value} \times \textit{revaluation rate}$$

- (3) For the purposes of subclauses (1) and (2), **unallocated revaluation** and **revaluation** for that **fibre asset** are nil if-
- (a) a **fibre asset's asset life** at the end of the **disclosure year** is nil; or
 - (b) a **core fibre asset** is a-

- (i) **disposed asset**; or
- (ii) **deregulated asset**.

(4) 'Revaluation rate' means, in respect of a **disclosure year**, the amount determined in accordance with the formula-

$$\left(\frac{CPI_4}{CPI_4^{-4}} \right) - 1$$

where-

CPI_4 means **CPI** for the quarter that coincides with the end of the **disclosure year**; and

CPI_4^{-4} means **CPI** for the quarter that coincides with the end of the preceding **disclosure year**.

2.2.11 Revaluation treated as income

(1) For the purposes of determining profitability, **revaluation** must be treated as income.

2.2.12 Value of commissioned assets

(1) Subject to subclause (2) and (3), 'value of commissioned asset', in relation to a **core fibre asset** or **UFB asset** (including a **core fibre asset** or **UFB asset** in respect of which **capital contributions** were received, or a **vested asset**), means-

- (a) the cost-
 - (i) incurred by a **regulated provider** under **GAAP** in constructing or acquiring the **core fibre asset** or **UFB asset**, net of **capital contributions**; or
 - (ii) if **Chorus** owned the **core fibre asset** or **UFB asset** before 1 December 2011, recorded by **Chorus** for the **core fibre asset** or **UFB asset** in its published general purpose financial statements as of 1 December 2011; and
- (b) adjusting that cost for accumulated depreciation and impairment losses (if any) recognised by the **regulated provider** (ignoring any accounting adjustment for **Crown financing**), as at the **commissioning date**, under **GAAP**.

(2) For the purposes of subclause (1), the **value of commissioned asset** of-

- (a) an **easement**, is limited to its market value as on its **commissioning date** as determined by a **valuer**;
- (b) **easement land** is nil;
- (c) a **network spare** which is not required, in light of the historical reliability and number of the **core fibre assets** or **UFB assets** the **network spare** is held to replace, is nil;

- (d) a **network spare** whose cost is not treated wholly as or part of the cost of a **core fibre asset** or **UFB asset** under **GAAP**, is nil;
 - (e) a **core fibre asset** acquired from another **regulated provider** and employed by that **regulated provider** in the provision of **regulated FFLAS**, is limited to the **unallocated closing RAB value** of the **core fibre asset** that would have applied for the other **regulated provider** in the **disclosure year** when the **core fibre asset** was transferred;
 - (f) a **UFB asset** acquired from another **regulated provider** and employed by that **regulated provider** in the provision of **UFB FFLAS**, is limited to the **unallocated UFB asset initial value** of the **UFB asset** that would have applied for the other **regulated provider** in the **financial loss year** when the **UFB asset** was transferred;
 - (g) a **core fibre asset** or **UFB asset** that was previously employed by a **regulated provider** or another entity in the supply of **Part 4 regulated services**, is limited to the ‘unallocated opening RAB value’ of the **core fibre asset** or **UFB asset** in relation to those **Part 4 regulated services** as on the day before the **commissioning date** (as ‘unallocated opening RAB value’ is defined in the **input methodologies** as applying to the supply of **Part 4 regulated services** supplied by the **regulated provider** or other entity);
 - (h) a **core fibre asset** or a component of a **core fibre asset** acquired in a **related party transaction**, is the cost specified in clause 2.2.14;
 - (i) a **UFB asset** or a component of a **UFB asset** acquired in a **related party transaction**, is the cost specified in clause 2.2.14; and
 - (j) a **vested asset**, in respect of which the **vested asset’s** fair value is treated as its cost under **GAAP**, must exclude any amount of the fair value of the **vested asset** determined under **GAAP** that exceeds the amount of consideration provided by the **regulated provider**.
- (3) When applying **GAAP** for the purposes of subclause (1), the cost of financing is-
- (a) applicable only in respect of the period commencing on the date an asset becomes a **works under construction** and terminating on its **commissioning date**; and
 - (b) calculated using a rate not greater than the **regulated provider’s** weighted average of borrowing costs for each applicable **disclosure year** and **financial loss year**.
- (4) For the purposes of subclause (3)(b), the ‘weighted average of borrowing costs’ is calculated for a **disclosure year** and **financial loss year** using principles set out in **GAAP**, where:

- (a) the cost of financing rate is the weighted average of the costs applicable to borrowings in respect of **capital expenditure** that are outstanding during the **disclosure year** or **financial loss year**;
- (b) the total costs applicable to borrowings outstanding, as used in calculating the weighted average, must include costs of borrowings made specifically for the purpose of any particular **capital expenditure projects** or **capital expenditure programmes**;
- (c) the amount of borrowing costs capitalised during the **disclosure year** or **financial loss year** must not exceed the amount of borrowing costs incurred during the **disclosure year** or **financial loss year**;
- (d) if a **regulated provider** receives a **capital contribution**, the relevant asset becomes **works under construction** for the purposes of calculating the cost of financing;
- (e) subject to paragraph (i), a **capital contribution** will reduce the cost of **works under construction** for the purpose of the calculation of the finance cost, even if the resulting value of **works under construction** is negative;
- (f) subject to paragraph (g), if the value of **works under construction** is negative in accordance with paragraph (e), the cost of financing for the period ending on the **commissioning date** will be negative;
- (g) if the cost of financing an asset which is **works under construction** is negative under paragraph (f), the value of the relevant asset or assets will reduce by that negative amount if such a reduction is not otherwise made under **GAAP**;
- (h) for the purpose of paragraph (d), **works under construction** includes assets that are forecast to be enhanced or acquired; and
- (i) if the cost of financing is derived as income in relation to **works under construction** and is both negative and included in regulatory income under an **ID determination**, the value of the relevant asset or assets will not reduce if such a reduction is not otherwise made under **GAAP**.

(5) For the avoidance of doubt-

- (a) revenue derived in relation to **works under construction** that is not included in regulatory income under an **ID determination** or preceding regulatory information disclosure requirements reduces the cost of an asset by the amount of the revenue if such a reduction is not otherwise made under **GAAP**; and
- (b) if, after a **core fibre asset** or **UFB asset** is **commissioned**, a **regulated provider** incurs expenditure on the **core fibre asset** or **UFB asset** that forms part of the cost of that **core fibre asset** or **UFB asset** under **GAAP**, such expenditure is treated as relating to a separate asset.

2.2.13 Minimum levels of specificity required to describe assets in RAB

- (1) A **regulated provider** must ensure it maintains adequate records, recording the regulatory characteristics of assets that make up the **fibre assets** in the **initial RAB** and any subsequent **closing RAB value** and **opening RAB value**, to satisfy the minimum levels of specificity set out in Table A.1 of Schedule A.

2.2.14 Related party transactions

- (1) For the purposes of clause 2.2.12(2)(h), the cost of a **core fibre asset**, or a component of a **core fibre asset**, acquired in a **related party transaction**, must be determined on the basis that—
 - (a) it must be given a value not greater than if that transaction had the terms of an **arm's-length transaction**;
 - (b) an objective and independent measure must be used in determining the terms of an **arm's-length transaction**; and
 - (c) the value that qualifies for recognition as the cost of the **core fibre asset** or the component of a **core fibre asset** must not exceed the actual amount charged to the **regulated provider** by the **related party**.
- (2) For the purpose of subclause (1)(a), a **related party transaction** will be treated as if it had the terms of an **arm's-length transaction** if the **core fibre asset**, or component of the **core fibre asset**, acquired from a **related party** is valued at the cost incurred by the **related party**, provided that this is—
 - (a) fair and reasonable to the **regulated provider**; and
 - (b) substantially the same as the cost that has been incurred or would be incurred by the **related party** in providing the same type of **core fibre asset** to third parties.
- (3) For the purposes of clause 2.2.12(2)(i), the cost of a **UFB asset**, or a component of a **UFB asset**, acquired in a **related party transaction**, must be determined on the basis that—
 - (a) it must be given a value not greater than if that transaction had the terms of an **arm's-length transaction**;
 - (b) an objective and independent measure must be used in determining the terms of an **arm's-length transaction**; and
 - (c) the value that qualifies for recognition as the cost of the **UFB asset** or the component of a **UFB asset** must not exceed the actual amount charged to the **regulated provider** by the **related party**.
- (4) For the purpose of subclause (3)(a), a **related party transaction** will be treated as if it had the terms of an **arm's-length transaction** if the **UFB asset**, or component of the **UFB asset**, acquired from a **related party** is valued at the cost incurred by the **related party**, provided that this is—

- (a) fair and reasonable to the **regulated provider**; and
- (b) substantially the same as the cost that has been incurred or would be incurred by the **related party** in providing the same type of **UFB asset** to third parties.

SUBPART 3 **Taxation**

2.3.1 Regulatory tax allowance

- (1) Regulatory tax allowance is, where **regulatory net taxable income** is-
 - (a) nil or a positive number, the **tax effect of regulatory net taxable income**; and
 - (b) a negative number, nil.
- (2) ‘Regulatory net taxable income’ is **regulatory taxable income** less **utilised tax losses**.
- (3) Subject to subclause (4), ‘regulatory taxable income’ is the amount determined after applying the **tax rules**, excluding the **tax rules** that apply to the effect of any tax losses, to **regulatory profit / (loss) before tax**.
- (4) For the purposes of determining **regulatory taxable income**, if the **tax rules** allow for a choice of methods in calculating taxable income, the same methods used by the **regulated provider** must also be used to determine the **regulatory taxable income**.
- (5) ‘Regulatory profit / (loss) before tax’ means the amount of regulatory profit / (loss) before tax as determined in accordance with an **ID determination**.
- (6) For the purpose of subclause (3), in applying the **tax rules** in respect of particular items of income and expenses included in **regulatory profit / (loss) before tax**-
 - (a) any tax deduction for interest incurred in relation to debt must be substituted with a tax deduction for **notional deductible interest**;
 - (b) any tax deduction for depreciation is only available in respect of a **fibre asset** and must be calculated by applying the **tax depreciation rules** to the **regulatory tax asset value** of the **fibre asset** in question; and
 - (c) the following must be ignored:
 - (i) any **revaluation** included in **regulatory profit / (loss) before tax**; and
 - (ii) the effect of any tax losses (other than those produced from the provision of **regulated FFLAS**) made by a **regulated provider**.
- (7) ‘Notional deductible interest’ means-
 - (a) for the purpose of clause 2.3.4(1), the product of multiplying the **adjusted UFB asset initial values** by both **leverage** and the **cost of debt**, minus the **avoided financing cost building block**; and

- (b) in all other instances, the product of multiplying the sum of all **opening RAB values** by both **leverage** and the **cost of debt**, minus the **avoided financing cost building block**.

2.3.2 Regulatory tax asset value

- (1) 'Regulatory tax asset value', in relation to a **fibre asset**, means the value determined in accordance with the formula-

$$\textit{tax asset value} \times \textit{result of asset allocation ratio}$$

- (2) 'Tax asset value' means-

- (a) in respect of the following **fibre assets**, the value of the **fibre asset** determined by applying the **tax depreciation rules** to its **notional tax asset value**:

- (i) a **fibre asset** in the **initial RAB** where, as of the date when the 'regulatory tax asset value' is determined at **implementation date**, the sum of **unallocated initial RAB values** is less than the sum of the **adjusted tax values** of all **fibre assets** in the **initial RAB**;
- (ii) a **fibre asset** in the **initial RAB** where, as of the date when the 'regulatory tax asset value' is determined in the **financial loss period**, the **opening UFB asset base value** is less than the sum of the **adjusted tax values** of all **UFB assets** as of that date;
- (iii) a **fibre asset** acquired from a **regulated provider** who used it to provide **regulated FFLAS**;
- (iv) a **fibre asset** acquired from a **Part 4 regulated supplier** who used it to supply **Part 4 regulated services**;
- (v) a **fibre asset** acquired or transferred from a **related party**; and

- (b) in respect of any other **fibre asset**, its **adjusted tax value**.

- (3) 'Notional tax asset value' means-

- (a) for the purpose of subclause (2)(a)(i), **adjusted tax value** of the **fibre asset** as of the **implementation date** adjusted to account proportionately for the difference between:

- (i) the sum of the **unallocated initial RAB values** for all **core fibre assets** and the **opening RAB value** of the **financial loss asset**; and
- (ii) sum of the **adjusted tax values** of all **fibre assets** in the **initial RAB**;

- (b) for the purpose of subclause (2)(a)(ii), **adjusted tax value** of the **UFB asset** as of the date when the 'regulatory tax asset value' is determined, adjusted to account proportionately for the difference between the **opening UFB asset base value** as of that date and the sum of the

adjusted tax values of all **UFB assets** in the **opening UFB asset base value** as of that date;

- (c) for the purpose of subclause (2)(a)(iii), value after applying the **tax depreciation rules** to the 'tax asset value' in respect of the **regulated provider** from which the **fibre asset** was acquired in respect of the **disclosure year** in which the **fibre asset** was acquired;
- (d) for the purpose of subclause (2)(a)(iv), value after applying the **tax depreciation rules** to the tax asset value (as 'tax asset value' is defined in the **input methodologies** applying to the **Part 4 regulated service** in question) in respect of the **disclosure year** in which the **fibre asset** was acquired; and
- (e) for the purpose of subclause (2)(a)(v), value in respect of the **disclosure year** in which the **fibre asset** was acquired or transferred that is-
 - (i) consistent with the **tax rules**; and
 - (ii) limited to its **value of commissioned asset** or, if relevant **capital contributions** are treated for tax purposes in accordance with section CG 8 of the Income Tax Act 2007 (or subsequent equivalent provisions), limited to the **value of commissioned asset** plus any taxed **capital contributions** applicable to the **fibre asset** and does not include any **Crown financing**.

(4) Where 'regulatory tax asset value' is determined at **implementation date** or thereafter, 'result of asset allocation ratio' means-

- (a) where a **fibre asset** or group of **fibre assets** maintained under the **tax rules** has a matching **fibre asset** or group of **fibre assets** maintained for the purposes of an **ID determination**, the value obtained in accordance with the formula-

$$\frac{\textit{opening RAB value or sum of opening RAB values}}{\textit{unallocated opening RAB value or sum of unallocated opening RAB values}}$$

applying the formula in respect of the **fibre asset** or smallest group of **fibre assets** maintained for the purposes of an **ID determination** that has a matching **fibre asset** or group of **fibre assets** maintained under the **tax rules**; and

- (b) where a **fibre asset** or group of **fibre assets** maintained under the **tax rules** does not have a matching **fibre asset** or group of **fibre assets** maintained for the purposes of an **ID determination**, the value of the **fibre asset** allocated to the provision of **regulated FFLAS** were Subpart 2 to apply to the **fibre asset** or group of **fibre assets**.

- (5) Where 'regulatory tax asset value' is determined in the **financial loss period**, 'result of asset allocation ratio' means-
- (a) where a **UFB asset** or group of **UFB assets** maintained under the **tax rules** has a matching **UFB asset** or group of **UFB assets** maintained for the purposes of an **ID determination**, the value obtained in accordance with the formula-

$$\frac{\textit{UFB asset initial value or sum of UFB asset initial values}}{\textit{unallocated UFB asset initial value or sum of unallocated UFB asset initial values}}$$
 applying the formula in respect of the **UFB asset** or smallest group of **UFB assets** maintained for the purposes of an **ID determination** that has a matching **UFB asset** or group of **UFB assets** maintained under the **tax rules**; and
 - (b) where a **UFB asset** or group of **UFB assets** maintained under the **tax rules** does not have a matching **UFB asset** or group of **UFB assets** maintained for the purposes of an **ID determination**, the value of the **UFB asset** allocated to the provision of **UFB FFLAS** were Subpart 2 to apply to the **UFB asset** or group of **UFB assets**.
- (6) 'Opening UFB asset base value' means the sum of the initial value of all **UFB assets** employed to provide **UFB FFLAS** for the **financial loss year** to date, where the initial value of a **UFB asset** is calculated by taking the cost-
- (a) incurred by a **regulated provider** in constructing or acquiring the **UFB asset**, net of **capital contributions**; or
 - (b) if the **UFB asset** was owned by **Chorus** before 1 December 2011, recorded by **Chorus** for the **UFB asset** in its published general purpose financial statements as of 1 December 2011.

2.3.3 Tax losses

- (1) 'Utilised tax losses' means opening tax losses, subject to subclause (2).
- (2) For the purpose of subclause (1), utilised tax losses may not exceed **regulatory taxable income**.
- (3) In this clause, 'opening tax losses'-
 - (a) on 1 December 2011, are nil;
 - (b) for **disclosure year** 2012, are closing tax losses on the last day of **disclosure year** 2012; and
 - (c) for a **disclosure year** that commenced after **disclosure year** 2012, are closing tax losses for the preceding **disclosure year**.

- (4) For the purpose of subclauses (3)(b)-(c), 'closing tax losses' means the amount determined in accordance with the following formula, in which each term is an absolute value:

$$\textit{opening tax losses} + \textit{current period tax losses} - \textit{utilised tax losses}$$

- (5) For the purpose of subclause (4), 'current period tax losses' is, where **regulatory taxable income** is-
- (a) nil or a positive number, nil; and
 - (b) a negative number, **regulatory taxable income**.

2.3.4 Tax costs for determining the unrecovered returns on investment

- (1) Subject to subclause (2), 'tax costs' means, for a **financial loss year** (or part **financial loss year**), the amount determined after applying the **tax rules** regarding the determination of taxable income, excluding the **tax rules** that apply to the effect of any tax losses, to **UFB revenues**, minus depreciation under **GAAP**, **operating expenditure** and **notional deductible interest**.
- (2) For the purposes of determining the 'tax costs', if the **tax rules** allow for a choice of methods in calculating taxable income, the same methods used by the **regulated provider** must be used to determine the 'tax costs'.
- (3) 'Adjusted UFB asset initial values' means:
- (a) for **financial loss year** 2012, nil;
 - (b) for a **financial loss year** (or **part financial loss year**) thereafter, the amount calculated in accordance with the following formula:

opening UFB asset base value calculated for that **financial loss year** in accordance with clause 2.2.3(27)
-opening balance of unrecovered returns on investment for notional deductible interest.
- (4) 'Opening balance of unrecovered returns on investment for notional deductible interest' means:
- (a) for **financial loss year** 2012, nil;
 - (b) for **financial loss year** 2013, **unrecovered returns on investment for financial loss year** 2012;
 - (c) for a **financial loss year** thereafter, the **closing balance of unrecovered returns on investment for notional deductible interest** for the previous **financial loss year**.
- (5) 'Closing balance of unrecovered returns on investment for notional deductible interest' means the amount calculated in accordance with the following formula:

opening balance of unrecovered returns on investment for notional deductible interest for the **financial loss year**
+ an adjustment for the accumulated depreciation and impairment losses (if any) that would be recognised by the **regulated provider** (ignoring any **Crown financing**) as at the first day of the **financial loss year**) under **GAAP**, were the “opening balance of unrecovered returns on investment for notional deductible interest” value recognised under **GAAP**
+ **unrecovered returns on investment** for the **financial loss year**.

SUBPART 4 **Cost of capital**

2.4.1 Methodology for estimating the weighted average cost of capital

- (1) The **Commission** will determine a mid-point estimate of vanilla **WACC** for each **disclosure year**-
- in respect of the **regulatory period term** commencing on the first day of the **disclosure year** in question;
 - within 1 month of the start of the **disclosure year** in question; and
 - in accordance with the formula-

$$r_d L + r_e(1 - L).$$

- (2) The **Commission** will determine a mid-point estimate of post-tax **WACC** for each **disclosure year**-
- in respect of the **regulatory period term** commencing on the first day of the **disclosure year** in question;
 - within 1 month of the start of the **disclosure year** in question; and
 - in accordance with the formula-

$$r_d (1 - T_c)L + r_e (1 - L).$$

- (3) In this clause-

L is **leverage**;

r_d is the cost of debt and is estimated in accordance with the formula:

$$r_f + p + d;$$

r_e is the cost of equity and is estimated in accordance with the formula:

$$r_f(1 - T_i) + \beta_e TAMRP;$$

T_c is the average corporate tax rate;

r_f is the risk-free rate;

p is the **average debt premium**;

d is the **debt issuance costs**;

T_i is the average investor tax rate;

β_e is the equity beta; and

$TAMRP$ is the tax-adjusted market risk premium.

(4) For the purpose of this clause-

- (a) the average investor tax rate, the equity beta, the **debt issuance costs**, the average **corporate tax rate** and the tax-adjusted market risk premium are the amounts specified in or determined in accordance with clause 2.4.2; and
- (b) the risk-free rate must be estimated in accordance with clause 2.4.3.

2.4.2 Fixed WACC parameters

- (1) 'Average investor tax rate' is the average of the investor tax rates that, as at the date that the estimation is made, will apply to each of the **disclosure years** in the **regulatory period term** commencing on the first day of the **disclosure year** in question.
- (2) For the purpose of subclause (1), 'investor tax rate' is, for each **disclosure year**, the maximum **prescribed investor rate** applicable at the start of that **disclosure year** to an individual who is-
 - (a) a resident in New Zealand; and
 - (b) an investor in a **multi-rate PIE**.
- (3) The 'average corporate tax rate' is the average of the **corporate tax rates** that, as at the date that the estimation is made, will apply during the **regulatory period term** commencing on the first day of the **disclosure year** in question.
- (4) The 'Equity beta' is 0.71.
- (5) 'Debt issuance costs' are determined by the term of the **regulatory period**, where-
 - (a) for a five year **regulatory period**, this is 0.2%;
 - (b) for a four year **regulatory period**, this is 0.25%; and
 - (c) for a three year **regulatory period**, this is 0.33%.
- (6) 'Tax-adjusted market risk premium' is 7.5%.

2.4.3 Methodology for estimating risk-free rate

(1) The **Commission** will estimate a risk-free rate-

- (a) for each **disclosure year**; and
- (b) within 1 month of the start of the **disclosure year** in question,

by-

- (c) obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds, the wholesale market linearly-interpolated bid yield to maturity for a residual period to maturity equal to the **regulatory period term** on each **business day** in the 3 months preceding the start of the **disclosure year**;
- (d) calculating the annualised interpolated bid yield to maturity for each **business day**; and
- (e) calculating the unweighted arithmetic average of the daily annualised interpolated bid yields to maturity.

2.4.4 Methodology for estimating average debt premium

- (1) The **Commission** will determine an estimate of an amount for the **average debt premium**-
 - (a) for each **disclosure year**; and
 - (b) within 1 month of each **disclosure year**.
- (2) For the purpose of subclause (1), ‘average debt premium’ means the unweighted arithmetic average of the five **debt premium** values estimated in accordance with subclauses (4) and (5) for:
 - (a) the current **debt premium reference year**; and
 - (b) the four previous **debt premium reference years**.
- (3) For the purpose of subclause (2)(a), ‘current debt premium reference year’ refers to the **debt premium reference year** that contains the start of the **disclosure year**.
- (4) ‘Debt premium’ means the spread between-
 - (a) the bid yield to maturity on **vanilla NZ\$ denominated bonds** that-
 - (i) are issued by a **regulated fibre service provider**;
 - (ii) are publicly traded;
 - (iii) have a **qualifying rating** of grade BBB+; and
 - (iv) have a remaining term to maturity of 5 years; and
 - (b) the contemporaneous interpolated bid yield to maturity of notional benchmark New Zealand government New Zealand dollar denominated nominal bonds having a remaining term to maturity of 5 years.
- (5) For the purpose of subclause (2), the amount of the **debt premium** will be estimated by-
 - (a) identifying publicly traded **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer** that are-
 - (i) **investment grade credit rated**; and
 - (ii) of a type described in the paragraphs of subclause (6);

- (b) for each **business day** in the 12 months preceding the start of the **debt premium reference year**, in respect of each bond identified in accordance with paragraph (a)-
 - (i) obtaining its wholesale market annualised bid yield to maturity;
 - (ii) calculating by linear interpolation with respect to maturity, the contemporaneous wholesale market annualised bid yield to maturity for a notional benchmark New Zealand government New Zealand dollar denominated nominal bond with the same remaining term to maturity; and
 - (iii) calculating its contemporaneous interpolated bid to bid spread over notional benchmark New Zealand government New Zealand dollar denominated nominal bonds with the same remaining term to maturity, by deducting the yield calculated in accordance with sub-paragraph (ii) from the yield obtained in accordance with sub-paragraph (i).
 - (c) calculating, for each bond identified in accordance with paragraph (a), the un-weighted arithmetic average of the daily spreads identified in accordance with paragraph (b)(iii); and
 - (d) subject to subclause (6), estimating, by taking account of the average spreads identified in accordance with paragraph (c) and having regard to the debt premium estimated from applying the **Nelson-Siegel-Svensson approach**, the average spread that would reasonably be expected to apply to a **vanilla NZ\$ denominated bond** that-
 - (i) is issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (ii) is publicly traded;
 - (iii) has a **qualifying rating** of grade BBB+; and
 - (iv) has a remaining term to maturity of 5 years.
- (6) For the purpose of subclauses (5)(a) and (5)(d), the **Commission** will have regard, subject to subclause (7), to the spreads observed on the following types of **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer**:
- (a) those that-
 - (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or

- (B) a **local authority**;
 - (b) those that-
 - (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by a **telecommunications service provider** other than a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (c) those that-
 - (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by an entity other than a **regulated fibre service provider** or **telecommunications service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (d) those that-
 - (i) have a **qualifying rating** of a grade different to BBB+; and
 - (ii) are issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (e) those that-
 - (i) have a **qualifying rating** of a grade different to BBB+; and
 - (ii) are issued by an entity other than a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**; and
 - (f) those that are-
 - (i) **investment grade credit rated**; and
 - (ii) issued by an entity that is 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**.
- (7) For the purpose of subclause (6)-
 - (a) progressively lesser regard will ordinarily be given to the spreads observed on the bond types described in accordance with the order in which the bond types are described in subclause (6);

- (b) the spread on any bond of the type described in subclause (6) that has a remaining term to maturity of less than 5 years will ordinarily be considered to be the minimum spread that would reasonably be expected to apply on an equivalently credit-rated bond issued by the same entity with a remaining term to maturity of 5 years; and
- (c) the **Commission** will adjust spreads observed on bonds described under subclauses (6)(b) to (6)(f) to approximate the spread that is likely to have been observed had the bonds in question been of the type described in subclause (6)(a).

2.4.5 Methodology for estimating the 50th percentile of WACC

- (1) The **Commission** will determine a WACC for each **mid-point estimate of WACC-**
 - (a) for each **disclosure year**; and
 - (b) within 1 month of the start of the **disclosure year** in question.
- (2) For the purpose of subclause (1), the **mid-point estimate of WACC** must be treated as the 50th percentile, where the **standard error** of the relevant **mid-point estimate of WACC** is 0.0124.

2.4.6 Interpretation of terms relating to term credit spread differential

- (1) 'Qualifying debt' means a line of debt-
 - (a) with an original tenor greater than 5 years; and
 - (b) issued by a **qualifying provider**.
- (2) 'Qualifying provider' means a **regulated provider** whose debt portfolio, as at the date of that provider's most recently published audited financial statements, has a weighted average original tenor greater than 5 years.

2.4.7 Term credit spread difference

- (1) 'Term credit spread difference' is determined in accordance with the formula-

$$T \times U,$$

where-

- (a) 'T' is whichever is the lesser of the amount determined in accordance with the formula-
 - (i) $0.00075 \times (\text{original tenor of the } \mathbf{qualifying\ debt} - 5)$; or
 - (ii) 0.00075×5 ;
 - (b) 'U' is the book value in New Zealand dollars of the **qualifying debt** at its date of issue.
- (2) For the purpose of this clause, if the **qualifying debt** is issued to a **related party**, 'original tenor of the **qualifying debt**' means whichever is the shorter of the-

- (a) tenor of the **qualifying debt**; or
- (b) period from the **qualifying debt**'s date of issue to the earliest date on which its repayment is or may be required.

2.4.8 Methodology for estimating term credit spread differential

(1) This clause applies to the determination of the amount of any **term credit spread differential** in respect of a **qualifying debt** for the purpose of disclosure under an **ID determination** of a-

- (a) **term credit spread differential allowance**; or
- (b) **term credit spread differential**.

(2) Disclosure to which this clause applies may only be made by a **qualifying provider**.

(3) 'Term credit spread differential' is the amount determined in accordance with the formula-

$$(A \div B) \times C \times D,$$

where-

- (a) 'A' is the sum of the **term credit spread difference** and debt issuance cost re-adjustment;
- (b) 'B' is the book value of the **qualifying provider's** total interest-bearing debt as at the balance date of the provider's financial statements audited and published in the **disclosure year** in question;
- (c) 'C' is **leverage**; and
- (d) 'D' is, in relation to the **qualifying provider**, the average of-
 - (i) the sum of **opening RAB values** for all **core fibre assets** and the **opening RAB value** for the **financial loss asset**; and
 - (ii) the sum of **closing RAB values** for all **core fibre assets** and the **closing RAB value** for the **financial loss asset**.

(4) For the purpose of subclause (3)(a), 'debt issuance cost re-adjustment' is the amount determined in accordance with the formula (which, for the avoidance of doubt, will be a negative number)-

$$(0.01 \div \textit{original tenor of the qualifying debt} - 0.002) \times \textit{book value in New Zealand dollars of the qualifying debt at its date of issue}.$$

2.4.9 Publication of estimates

(1) The **Commission** will publish all determinations and estimates that it is required to make under clauses 2.4.1-2.4.8-

- (a) on the **Commission's** website; and
- (b) no later than 1 month after having made them.

2.4.10 Methodology for estimating the weighted average cost of capital for accumulated unrecovered returns

(1) Before the **implementation date**, the **Commission** will determine estimates of vanilla **WACCs** for the purposes of clause 2.2.3 in respect of the **financial loss period**, where the estimates of **30 November 2011 WACC, 30 June 2012 WACC, 30 June 2013 WACC, 30 June 2014 WACC, 30 June 2015 WACC, 30 June 2016 WACC, 30 June 2017 WACC, 30 June 2018 WACC, 30 June 2019 WACC, 30 June 2020 WACC** and **30 June 2021 WACC** are determined in accordance with the formulas specified in subclause (2).

(2) For the purpose of subclause (1), “30 November 2011 WACC”, “30 June 2012 WACC”, “30 June 2013 WACC”, “30 June 2014 WACC”, “30 June 2015 WACC”, “30 June 2016 WACC”, “30 June 2017 WACC”, “30 June 2018 WACC”, “30 June 2019 WACC”, “30 June 2020 WACC” and “30 June 2021 WACC” are determined in accordance with the formula:

$$r_d L + r_e(1 - L).$$

(3) In this clause-

L is **leverage**;

r_d is the cost of debt and is estimated in accordance with the formula:

$$r_f + p + d;$$

r_e is the cost of equity and is estimated in accordance with the formula:

$$r_f(1 - T_i) + \beta_e TAMRP;$$

r_f is the risk-free rate;

p is the **debt premium**;

d is the debt issuance costs;

T_i is the investor tax rate;

β_e is the equity beta; and

$TAMRP$ is the tax-adjusted market risk premium.

(4) For the purpose of this clause-

(a) the investor tax rate, the equity beta, the debt issuance costs and the tax-adjusted market risk premium are the amounts specified in or determined in accordance with clause 2.4.11; and

(b) the risk-free rate must be estimated in accordance with clause 2.4.12.

(5) ‘Cost of capital’ means the value determined under subclauses (1)-(4) for the **financial loss year**, which-

- (a) for the **financial loss year 2012** is **30 November 2011 WACC**;
- (b) for the **financial loss year 2013** is **30 June 2012 WACC**;
- (c) for the **financial loss year 2014** is **30 June 2013 WACC**;
- (d) for the **financial loss year 2015** is **30 June 2014 WACC**;
- (e) for the **financial loss year 2016** is **30 June 2015 WACC**;
- (f) for the **financial loss year 2017** is **30 June 2016 WACC**;
- (g) for the **financial loss year 2018** is **30 June 2017 WACC**;
- (h) for the **financial loss year 2019** is **30 June 2018 WACC**;
- (i) for the **financial loss year 2020** is **30 June 2019 WACC**;
- (j) for the **financial loss year 2021** is **30 June 2020 WACC**; and
- (k) for the **financial loss year 2022** is **30 June 2021 WACC**.

2.4.11 Fixed WACC parameters for accumulated unrecovered returns

- (1) For the purpose of clause 2.4.10, 'investor tax rate' is, for each **financial loss year** (or part **financial loss year**) in the **financial loss period**, the maximum **prescribed investor rate** applicable at the start of that **financial loss year** to an individual who is-
 - (a) a resident in New Zealand; and
 - (b) an investor in a **multi-rate PIE**.
- (2) For the purpose of clause 2.4.10, the 'Equity beta' is 0.71.
- (3) For the purpose of clause 2.4.10, 'debt issuance costs' are 0.2%.
- (4) For the purpose of clause 2.4.10, 'tax-adjusted market risk premium' is:
 - (a) in respect of the period starting on 1 December 2011 and ending on the last day before the commencement date of this determination as specified in clause 1.1.3, 7.0%; and
 - (b) in respect of the period starting on the commencement date of this determination as specified in clause 1.1.3 and ending on the close of the day immediately before **implementation date**, 7.5%.

2.4.12 Methodology for estimating risk-free rate for accumulated unrecovered returns

- (1) For the purpose of clause 2.4.10, the **Commission** will estimate risk-free rates-
 - (a) that apply to each **financial loss year** of the **financial loss period**;
 - (b) which establish a term of the risk-free rate, where:
 - (i) for the **30 November 2011 WACC**, this is 10.1 years;
 - (ii) for the **30 June 2012 WACC**, this is 9.5 years;
 - (iii) for the **30 June 2013 WACC**, this is 8.5 years;
 - (iv) for the **30 June 2014 WACC**, this is 7.5 years;
 - (v) for the **30 June 2015 WACC**, this is 6.5 years;
 - (vi) for the **30 June 2016 WACC**, this is 5.5 years;
 - (vii) for the **30 June 2017 WACC**, this is 4.5 years;

- (viii) for the **30 June 2018 WACC**, this is 3.5 years;
 - (ix) for the **30 June 2019 WACC**, this is 2.5 years;
 - (x) for the **30 June 2020 WACC**, this is 1.5 years; and
 - (xi) for the **30 June 2021 WACC**, this is 0.5 years;
- (c) by obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds, the wholesale market linearly-interpolated bid yield to maturity for a residual period to maturity equal to the term specified in paragraph (b) on each **business day** in the 3 months preceding the start of the **financial loss year**;
 - (d) by calculating the annualised interpolated bid yield to maturity for each **business day**; and
 - (e) by calculating the unweighted arithmetic average of the daily annualised interpolated bid yields to maturity.

2.4.13 Methodology for estimating the debt premium for accumulated unrecovered returns

- (1) For the purpose of clause 2.4.10, the **Commission** will determine an estimate of an amount for the **debt premium** that applies to the **financial loss period** by-
 - (a) using the debt risk premium prevailing at the beginning of the year in the **financial loss period** which the median loss occurred; and
 - (b) establishing a term for the debt risk premium that is the number of years remaining in the **financial loss period**.
- (2) 'Debt premium' means the spread between-
 - (a) the bid yield to maturity on **vanilla NZ\$ denominated bonds** that-
 - (i) are issued by a **regulated fibre service provider**;
 - (ii) are publicly traded;
 - (iii) have a **qualifying rating** of grade BBB+; and
 - (iv) have a remaining term to maturity of a duration equal to the term calculated in subclause (1)(b); and
 - (b) the contemporaneous interpolated bid yield to maturity of notional benchmark New Zealand government New Zealand dollar denominated nominal bonds having a remaining term to maturity of a duration equal to the term calculated in subclause (1)(b).
- (3) For the purpose of subclause (1), the amount of the debt premium will be estimated by-
 - (a) identifying publicly traded **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer** that are-
 - (i) **investment grade credit rated**; and
 - (ii) of a type described in the paragraphs of subclause (4);

- (b) in respect of each bond identified in accordance with paragraph (a)-
 - (i) obtaining its wholesale market annualised bid yield to maturity;
 - (ii) calculating by linear interpolation with respect to maturity, the contemporaneous wholesale market annualised bid yield to maturity for a notional benchmark New Zealand government New Zealand dollar denominated nominal bond with the same remaining term to maturity; and
 - (iii) calculating its contemporaneous interpolated bid to bid spread over notional benchmark New Zealand government New Zealand dollar denominated nominal bonds with the same remaining term to maturity, by deducting the yield calculated in accordance with sub-paragraph (ii) from the yield obtained in accordance with sub-paragraph (i),

for each **business day** in the month preceding the start of the year in the **financial loss period** which the median loss occurred;

- (c) calculating, for each bond identified in accordance with paragraph (a), the un-weighted arithmetic average of the daily spreads identified in accordance with paragraph (b)(iii); and
- (d) subject to subclause (4), estimating, by taking account of the average spreads identified in accordance with paragraph (c) and having regard to the **debt premium** estimated from applying the **Nelson-Siegel-Svensson approach**, the average spread that would reasonably be expected to apply to a **vanilla NZ\$ denominated bond** that-
 - (i) is issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (ii) is publicly traded;
 - (iii) has a **qualifying rating** of grade BBB+; and
 - (iv) has a remaining term to maturity of a duration equal to the term calculated in subclause (1)(b).

(4) For the purpose of subclauses (3)(a) and (3)(d), the **Commission** will have regard, subject to subclause (5), to the spreads observed on the following types of **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer**:

- (a) those that-
 - (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by a **regulated fibre service provider** that is not 100% owned by:

- (A) the Crown; or
 - (B) a **local authority**;
 - (b) those that-
 - (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by a **telecommunications service provider** other than a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (c) those that-
 - (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by an entity other than a **regulated fibre service provider** or **telecommunications service provider** that is not 100% owned by:
 - (C) the Crown; or
 - (A) a **local authority**;
 - (d) those that-
 - (i) have a **qualifying rating** of a grade different to BBB+; and
 - (ii) are issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (e) those that-
 - (i) have a **qualifying rating** of a grade different to BBB+; and
 - (ii) are issued by an entity other than a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**; and
 - (f) those that are-
 - (i) **investment grade credit rated**; and
 - (ii) issued by an entity that is 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**.
- (5) For the purpose of subclause (4)-
- (a) progressively lesser regard will ordinarily be given to the spreads observed on the bond types described in accordance with the order in which the bond types are described in subclause (4);

- (b) the spread on any bond of the type described in subclause (4) that has a remaining term to maturity of less than a duration equal to the term calculated in subclause (1)(b) will ordinarily be considered to be the minimum spread that would reasonably be expected to apply on an equivalently credit-rated bond issued by the same entity with a remaining term to maturity of a duration equal to the term calculated in subclause (1)(b); and
- (c) the **Commission** will adjust spreads observed on bonds described under subclauses (4)(b) to (4)(e) to approximate the spread that is likely to have been observed had the bonds in question been of the type described in subclause (4)(a).

SUBPART 5 **Quality dimensions**

2.5.1 Mandatory quality dimensions

- (1) In setting information relating to quality that a **regulated provider** is required to disclose in an **ID determination**, the **Commission** must specify quality performance measures and statistics for one or more of the following **quality dimensions**:
 - (a) **availability**, which may include:
 - (i) maximum **downtime**;
 - (ii) average **downtime**; and
 - (iii) notification to **access seekers** of **outages**; and
 - (b) **performance**, which may include:
 - (i) **frame delay**;
 - (ii) **frame loss**;
 - (iii) **frame delay variation**; and
 - (iv) **port utilisation**.

2.5.2 Optional quality dimensions

- (1) The **Commission** may also specify quality performance measures and statistics for one or more of the following **quality dimensions**:
 - (a) **ordering**, which may include the time to accept or reject a request;
 - (b) **provisioning**, which may include the time to provision **regulated FFLAS**;
 - (c) **switching**, which may include:
 - (i) the time to disconnect **regulated FFLAS** from a losing **access seeker** and connect to a gaining **access seeker**; and
 - (ii) the time to disconnect from one type of **regulated FFLAS** and connect to another;

- (d) **faults**, which may include:
 - (i) incidence of faults, where “incidence of faults” is defined in an **ID determination**; and
 - (ii) time to **restore regulated FFLAS**; and
- (e) **customer service**, which may include:
 - (i) **end-user** connection satisfaction, where “end-user connection satisfaction” is defined in an **ID determination**;
 - (ii) missed appointments, where “missed appointments” is defined in an **ID determination**; and
 - (iii) the time to establish an **access seeker**, where “time to establish an **access seeker**” is defined in an **ID determination**.

2.5.3 Quality reporting requirements

- (1) In specifying information relating to quality that a **regulated provider** is required to disclose in an **ID determination**, the **Commission** may set different requirements for different **regulated providers**.
- (2) The **Commission** may also set different quality reporting requirements with reference to:
 - (a) geography;
 - (b) **fibre network** architecture;
 - (c) **regulated FFLAS**, such as layer 1 and layer 2; and
 - (d) **end-users**, such as rural, urban, business or residential.

PART 3 INPUT METHODOLOGIES FOR PRICE-QUALITY PATHS

SUBPART 1 Cost allocation

3.1.1 Calculation of PQ forecast values

- (1) For the purposes of specifying a price-quality path, clauses 2.1.1(1)-(2) apply.
- (2) Subject to subclause (1), for the purposes of specifying a price-quality path, any **operating cost** must be:
 - (a) determined by applying **cost allocators** in accordance with subclause (7) or **proxy cost allocators** (whichever the case may require); and
 - (b) calculated by applying forecasts, subject to subclauses (4) and (5).
- (3) Subject to subclause (1), for the purposes of specifying a price-quality path, any **asset value** must be:
 - (a) determined by applying **asset allocators** in accordance with subclause (8) or **proxy asset allocators** (whichever the case may require); and
 - (b) calculated by applying forecasts, subject to subclauses (4) and (5).
- (4) For the purpose of subclauses (2) and (3), all forecasts must be:
 - (a) based on relevant and demonstrably reasonable assumptions, data, methods and judgements; or
 - (b) if the **Commission** has approved the forecast values in accordance with clause [Regulatory Processes and Rules] under an **input methodology** or other process relating to an **ID determination** or **PQ determination**, consistent with those forecast values.
- (5) For the avoidance of doubt, subclause (4) relates to, but is not limited to, forecasts of **operating costs, capital expenditure**, revenue, or any of the **allocator types** and **allocator metrics** that may be used in forecasting an **asset allocator** or **cost allocator**.
- (6) For the purposes of subclauses (2) and (3), any reference to 'requirements in the relevant **ID determination**' in Subpart 1 of Part 2 means 'any requirement specified by the **Commission**'.
- (7) For the purpose of subclause (2), **cost allocators** must be used to allocate **operating costs** not **directly attributable** to either-
 - (a) **regulated FFLAS**; or
 - (b) **services that are not regulated FFLAS**.
- (8) For the purpose of subclause (3), **asset allocators** must be used to allocate **asset values** not **directly attributable** to either-
 - (a) **regulated FFLAS**; or

- (b) **services that are not regulated FFLAS.**

SUBPART 2 **Asset valuation**

3.2.1 Calculation of price-quality path forecast values

- (1) For the purposes of specifying a price-quality path, any values specified in subclause (2) must be determined in accordance with the **input methodologies** specified in Subpart 2 of Part 2 and determined in accordance with subclause (3).
- (2) The values referred to in subclause (1) are:
 - (a) **opening RAB value;**
 - (b) **value of commissioned asset;**
 - (c) **disposed asset;**
 - (d) **revaluation;**
 - (e) **closing RAB value;** and
 - (f) any other allowance, amount, cost or sum referred to in Subpart 2 of Part 2.
- (3) The values referred to in subclause (1) must be determined by:
 - (a) adopting any relevant value calculated under Subpart 2 of Part 2 in respect of the **base year** of a **regulated provider**-
 - (i) in respect of a disclosure made by a **regulated provider** for that **base year** under an **ID determination**; or
 - (ii) if disclosure under an **ID determination** has not been required or made by the **regulated provider**, provided to the **Commission** under s 98 of the Commerce Act 1986 or s 221 of the **Act**; and
 - (b) subject to subclauses (4) and (5), applying forecasts of all values required to determine the values referred to in paragraphs (a) to (f) of subclause (2) by applying the **input methodologies** specified in Subpart 2 of Part 2.
- (4) For the purpose of subclause (1), all forecasts, subject to subclause (5), must be:
 - (a) based on relevant and demonstrably reasonable assumptions, data, methods and judgements; or
 - (b) if the **Commission** has approved the forecast values in accordance with [Regulatory Processes and Rules] under an **input methodology** or other process relating to an **ID determination** or **PQ determination**, consistent with those forecast values.
- (5) For the purpose of subclause (3), where **CPI** is required to be forecast, it must be determined as follows:
 - (a) for a quarter prior to the quarter for which the vanilla **WACC** applicable to the relevant **regulatory period** was determined, **CPI** as per paragraph

- (a) of the **CPI** definition and excluding any adjustments made under paragraph (b) of the **CPI** definition arising as a result of an event that occurs after the issue of the Monetary Policy Statement referred to in paragraph (b) below;
- (b) for each subsequent quarter for which a forecast of the change in headline **CPI** is included in the Monetary Policy Statement last issued by the Reserve Bank of New Zealand prior to the date for which the vanilla **WACC** applicable to the relevant **regulatory period** was determined, the **CPI** last applying under paragraph (a) extended by the forecast change; and
- (c) in respect of subsequent quarters, the forecast last applying under paragraph (b) adjusted such that an equal increment or decrement made to that forecast for each of the following three years results in the forecast for the last of those years being equal to the target midpoint for the change in headline **CPI** set out in the Monetary Policy Statement referred to in paragraph (b).

3.2.2 Depreciation

- (1) 'Unallocated depreciation' and 'depreciation' are determined in accordance with subclauses (2)-(3).
- (2) For the purpose of subclause (1), subject to subclause (7), in the case of a **fibre asset** with an **unallocated opening RAB value**, 'unallocated depreciation' must be determined using a depreciation method consistent with **GAAP**, unless:
 - (a) an alternative depreciation method is applied for some or all **fibre assets** in accordance with subclause (5); or
 - (b) a different depreciation method is applied for some or all **fibre assets** in accordance with subclause (6).
- (3) For the purpose of subclause (1), subject to subclause (7), in the case of a **fibre asset** with an **opening RAB value**, 'depreciation' must be determined using a depreciation method consistent with **GAAP**, unless:
 - (a) an alternative depreciation method is applied for some or all **fibre assets** in accordance with subclause (5); or
 - (b) a different depreciation method is applied for some or all **fibre assets** in accordance with subclause (6).
- (4) For the purposes of subclauses (2) and (3)-
 - (a) 'unallocated depreciation' and 'depreciation' are nil in the case of-
 - (i) **land**; and
 - (ii) an **easement** other than a **fixed life easement**; and

- (b) in all other cases, where the **fibre asset's remaining asset life** at the end of the **regulatory year** is nil-
 - (i) 'unallocated depreciation' is the **fibre asset's unallocated opening RAB value**; and
 - (ii) 'depreciation' is the **fibre asset's opening RAB value**.
- (5) For the purposes of subclauses (2)-(3), an alternative depreciation method may be applied for some or all **fibre assets** if the **Commission** is satisfied that the result of applying the alternative method-
 - (a) better promotes the purpose of Part 6 of the **Act**;
 - (b) where relevant, best gives, or is likely to best give, effect to s 166(2)(b) of the **Act**; and
 - (c) where relevant, is consistent with the **Commission's** smoothing of prices or revenue under s 197 of the **Act**.
- (6) After the **first regulatory period**, a different depreciation method may be applied for a **regulatory period** to that applied in the previous **regulatory period** if the **Commission** is satisfied, for the purposes of a price-quality path, that the new depreciation method-
 - (a) better promotes the purpose of Part 6 of the **Act**;
 - (b) where relevant, best gives, or is likely to best give, effect to s 166(2)(b) of the **Act**; and
 - (c) where relevant, is consistent with the **Commission's** smoothing of prices or revenue under s 197 of the **Act**.
- (7) Where an alternative depreciation method has been applied under subclause (5), a different depreciation method has been adopted under subclause (6), or the **Commission** has altered depreciation under clause 3.2.3, 'unallocated depreciation' and 'depreciation' must be applied using that method for subsequent **regulatory periods** unless:
 - (a) the **Commission** is satisfied that a different depreciation method may be applied for that **regulatory period** in accordance with subclause (6); or
 - (b) the **Commission** alters depreciation for that **regulatory period** in accordance with clause 3.2.3.

3.2.3 Altering depreciation to smooth revenues and prices

- (1) For the purposes of clause 3.2.2, **unallocated depreciation** and **depreciation** calculated for any **core fibre asset** or the **financial loss asset** for any **regulatory period** may instead be calculated by the **Commission** in a manner it thinks fit under s 197 of the **Act**.

3.2.4 Revaluation treated as income

- (1) For the purposes of specifying a price-quality path, **revaluation** must be treated as income.

3.2.5 Ex-ante allowance for asset stranding

- (1) This clause applies to the determination of the amount of the annual ex-ante allowance for asset stranding for the purpose of specifying a price-quality path.
- (2) The annual ex-ante allowance for asset stranding is the amount determined in accordance with the formula-

$$A \times B$$

where –

- (a) 'A' is 0.001; and
- (b) 'B' is the average of –
 - (i) the sum of **opening RAB values** for all **core fibre assets** and the **opening RAB value** for the **financial loss asset**; and
 - (ii) the sum of **closing RAB values** for all **core fibre assets** and the **closing RAB value** for the **financial loss asset**.

SUBPART 3 **Taxation**

3.3.1 Regulatory tax allowance

- (1) For the purposes of specifying a price-quality path, any value of regulatory tax allowance for any **regulatory year** within a **regulatory period** must be determined in accordance with the **input methodologies** specified in Subpart 3 of Part 2, and determined, subject to subclauses (2) and (3), by applying forecasts for all **disclosure years** after the **base year** of-
 - (a) **notional deductible interest**;
 - (b) tax deductions for depreciation using **tax depreciation rules**; and
 - (c) any other amount, determined after applying the **tax rules**, where the following must be ignored:
 - (i) any **revaluation** included in **regulatory profit / loss before tax**; and
 - (ii) the effect of any tax losses (other than those incurred in the provision of **regulated FFLAS**) made by a **regulated provider**.
- (2) For the purposes of determining 'regulatory tax allowance', if the **tax rules** allow for a choice of methods in calculating taxable income, the same methods used by the **regulated provider** must be used to determine the 'regulatory tax allowance'.
- (3) For the purposes of subclause (1), all forecasts must be:
 - (a) based on relevant and demonstrably reasonable:

- (i) assumptions;
 - (ii) data;
 - (iii) methods; and
 - (iv) judgements; or
- (b) if the **Commission** has approved the forecast values in accordance with [Regulatory Processes and Rules] under an **input methodology** or other process relating to an **ID determination** or **PQ determination**, consistent with those forecast values.
- (4) For the purposes of subclause (1), ‘regulatory profit / loss before tax’ means ‘regulatory profit / loss before tax’ as determined by the **Commission** when specifying a price-quality path.

SUBPART 4 **Cost of capital**

3.4.1 Methodology for estimating the weighted average cost of capital

- (1) The **Commission** will determine a mid-point estimate of vanilla **WACC**-
- (a) as of the first **business day** of the month 7 months prior to the start of each **regulatory period**;
 - (b) in respect of the **regulatory period**;
 - (c) no later than 6 months prior to the start of each **regulatory period**; and
 - (d) in accordance with the formula-

$$r_d L + r_e(1 - L).$$

- (2) The **Commission** will determine a mid-point estimate of post-tax **WACC**-
- (a) as of the first **business day** of the month 7 months prior to the start of each **regulatory period**;
 - (b) in respect of the **regulatory period**;
 - (c) no later than 6 months prior to the start of each **regulatory period**; and
 - (d) in accordance with the formula-

$$r_d (1 - T_c)L + r_e (1 - L).$$

- (3) In this clause-

L is **leverage**;

r_d is the cost of debt and is estimated in accordance with the formula:

$$r_f + p + d;$$

r_e is the cost of equity and is estimated in accordance with the formula:

$$r_f(1 - T_i) + \beta_e TAMRP;$$

T_c is the average corporate tax rate;

r_f is the risk-free rate;
 p is the **average debt premium**;
 d is the debt issuance costs;
 T_i is the average investor tax rate;
 β_e is the equity beta; and
 $TAMRP$ is the tax-adjusted market risk premium.

- (4) For the purpose of this clause-
- (a) the average investor tax rate, the average corporate tax rate, the equity beta, the debt issuance costs and the tax-adjusted market risk premium are the amounts specified in or determined in accordance with clause 3.4.2; and
 - (b) the risk-free rate must be estimated in accordance with clause 3.4.3.

3.4.2 Fixed WACC parameters

- (1) 'Average investor tax rate' is the average of the investor tax rates that, as at the date that the estimation is made, will apply to each of the **regulatory years** in the **regulatory period** commencing on the first day of the **regulatory period** in question.
- (2) For the purpose of subclause (1), 'investor tax rate' is, for each **regulatory year**, the maximum **prescribed investor rate** applicable at the start of the **regulatory period** to an individual who is-
- (a) resident in New Zealand; and
 - (b) an investor in a **multi-rate PIE**.
- (3) The 'average corporate tax rate' is the average of the **corporate tax rates** that, as at the date that the estimation is made, will apply during the **regulatory period term** commencing on the first day of the **regulatory period**.
- (4) 'Equity beta' is 0.71.
- (5) 'Debt issuance costs' are determined by the term of the **regulatory period**, where-
- (a) for a five year **regulatory period**, this is 0.2%;
 - (b) For a four year **regulatory period**, this is 0.25%; and
 - (c) For a three year **regulatory period**, this is 0.33%.
- (6) 'Tax-adjusted market risk premium' is 7.5%.

3.4.3 Methodology for estimating risk-free rate

- (1) The **Commission** will estimate a risk-free rate-
- (a) as of the first **business day** of the month 7 months prior to the start of each **regulatory period**;
 - (b) in respect of a period equal to the **regulatory period**; and

- (c) no later than 6 months prior to the start of each **regulatory period**,
by-
- (d) obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds, the wholesale market linearly interpolated bid yield to maturity for a residual period to maturity equal to the **regulatory period term** on each **business day** in the 3-month period of 8 to 10 months prior to the start of the **regulatory period**;
- (e) calculating the annualised interpolated bid yield to maturity for each **business day**; and
- (f) calculating the unweighted arithmetic average of the daily annualised interpolated bid yields to maturity.

3.4.4 Methodology for estimating average debt premium

- (1) The **Commission** will determine an estimate of an amount for the **average debt premium**-
 - (a) for each **regulatory period**; and
 - (b) no later than 6 months prior to the start of each **regulatory period**.
- (2) For the purpose of subclause (1), 'average debt premium' means the unweighted arithmetic average of the five **debt premium** values estimated in accordance with subclauses (4) and (5) for:
 - (a) the current **debt premium reference year**; and
 - (b) the four previous **debt premium reference years**.
- (3) For the purpose of subclause (2)(a), 'current debt premium reference year' refers to the **debt premium reference year** that contains the start of the **regulatory year**.
- (4) Debt premium means the spread between-
 - (a) the bid yield to maturity on **vanilla NZ\$ denominated bonds** that-
 - (i) are issued by a **regulated fibre service provider**;
 - (ii) are publicly traded;
 - (iii) have a **qualifying rating** of grade BBB+; and
 - (iv) have a remaining term to maturity of 5 years; and
 - (b) the contemporaneous interpolated bid yield to maturity of notional benchmark New Zealand government New Zealand dollar denominated nominal bonds having a remaining term to maturity of 5 years.
- (5) For the purpose of subclause (2), the amount of the debt premium will be estimated by-

- (a) identifying publicly traded **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer** that are-
 - (i) **investment grade credit rated**; and
 - (ii) of a type described in the paragraphs of subclause (6);
 - (b) for each **business day** in the 12 months preceding the start of the **debt premium reference year**, in respect of each bond identified in accordance with paragraph (a)-
 - (i) obtaining its wholesale market annualised bid yield to maturity;
 - (ii) calculating by linear interpolation with respect to maturity, the contemporaneous wholesale market annualised bid yield to maturity for a notional benchmark New Zealand government New Zealand dollar denominated nominal bond with the same remaining term to maturity; and
 - (iii) calculating its contemporaneous interpolated bid to bid spread over notional benchmark New Zealand government New Zealand dollar denominated nominal bonds with the same remaining term to maturity, by deducting the yield calculated in accordance with sub-paragraph (ii) from the yield obtained in accordance with sub-paragraph (i);
 - (c) calculating, for each bond identified in accordance with paragraph (a), the un-weighted arithmetic average of the daily spreads identified in accordance with paragraph (b)(iii); and
 - (d) subject to subclause (6), estimating, by taking account of the average spreads identified in accordance with paragraph (c) and having regard to the debt premium estimated from applying the **Nelson-Siegel-Svensson approach**, the average spread that would reasonably be expected to apply to a **vanilla NZ\$ denominated bond** that-
 - (i) is issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
 - (ii) is publicly traded;
 - (iii) has a **qualifying rating** of grade BBB+; and
 - (iv) has a remaining term to maturity of 5 years.
- (6) For the purpose of subclauses (5)(a) and (5)(d), the **Commission** will have regard, subject to subclause (7), to the spreads observed on the following types of **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer**:
- (a) those that-

- (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
- (b) those that-
- (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by a **telecommunications service provider** other than a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
- (c) those that-
- (i) have a **qualifying rating** of grade BBB+; and
 - (ii) are issued by an entity other than a **regulated fibre service provider** or **telecommunications service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
- (d) those that-
- (i) have a **qualifying rating** of a grade different to BBB+; and
 - (ii) are issued by a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**;
- (e) those that-
- (i) have a **qualifying rating** of a grade different to BBB+; and
 - (ii) are issued by an entity other than a **regulated fibre service provider** that is not 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**; and
- (f) those that are-
- (i) **investment grade credit rated**; and
 - (ii) issued by an entity that is 100% owned by:
 - (A) the Crown; or
 - (B) a **local authority**.

(7) For the purpose of subclause (6)-

- (a) progressively lesser regard will ordinarily be given to the spreads observed on the bond types described in accordance with the order in which the bond types are described in subclause (6);
- (b) the spread on any bond of the type described in subclause (6) that has a remaining term to maturity of less than 5 years will ordinarily be considered to be the minimum spread that would reasonably be expected to apply on an equivalently credit-rated bond issued by the same entity with a remaining term to maturity of 5 years; and
- (c) the **Commission** will adjust spreads observed on bonds described under subclauses (6)(b) to (6)(f) to approximate the spread that is likely to have been observed had the bonds in question been of the type described in subclause (6)(a).

3.4.5 Methodology for estimating the 50th percentile estimate of WACC

- (1) The **Commission** will determine a 50th percentile estimate of vanilla **WACC**-
 - (a) for each **regulatory period**; and
 - (b) no later than 6 months prior to the start of each **regulatory period**.
- (2) The **Commission** will determine a 50th percentile estimate of post-tax **WACC**-
 - (a) for each **regulatory period**; and
 - (b) no later than 6 months prior to the start of each **regulatory period**.
- (3) For the purposes of subclause (1) or (2), the **mid-point estimate of WACC** must be treated as the 50th percentile, where the **standard error of the mid-point estimate of WACC** is 0.0124.

3.4.6 Publication of estimates

- (1) The **Commission** will publish all determinations and estimates that it is required to make by this subpart-
 - (a) on its website; and
 - (b) no later than 1 month after having made them.

3.4.7 Application of cost of capital methodology

- (1) Where the **Commission** takes into account the cost of capital in making a **PQ determination**, the **Commission** will use the **50th percentile estimate of WACC** determined in accordance with clause 3.4.5(1) and most recently published in accordance with clause 3.4.6.
- (2) 'Term credit spread differential allowance' for a **regulatory year** in respect of the **first regulatory period** and a **regulated provider** is the maximum of nil and the amount determined in accordance with the formula-

$$a \times b \div c,$$

where-

a means the sum of the **term credit spread differentials** calculated in accordance with clause 3.4.10(3) for the **base year**;

b means:

- (a) the sum of forecast **opening RAB values** for all **core fibre assets** and the forecast **opening RAB value** for the **financial loss asset** for the **regulatory year** in question; and
- (b) the sum of forecast **value of commissioned assets** for all **core fibre assets** for the **regulatory year** in question;

c means the sum of the **opening RAB values** for **core fibre assets** and the **opening RAB value** for the **financial loss asset** for the **base year**.

- (3) 'Term credit spread differential allowance' for a **regulatory year** in respect of the **second regulatory period** and subsequent **regulatory periods** and a **regulated provider** is the maximum of nil and the amount determined in accordance with the formula-

$$a \times b \div c,$$

where-

a means the 'term credit spread differential allowance' calculated in accordance with Part 2 for the **base year**;

b means:

- (a) the sum of forecast **opening RAB values** for all **core fibre assets** and the forecast **opening RAB value** for the **financial loss asset** for the **regulatory year** in question; and
- (b) the sum of forecast **value of commissioned assets** for all **core fibre assets** for the **regulatory year** in question;

c means the sum of the **opening RAB values** for **core fibre assets** and the **opening RAB value** for the **financial loss asset** for the **base year**.

- (4) Where a **qualifying provider** discloses a **term credit spread differential allowance** under an **ID determination**, the **Commission**, for the purpose of assessing the **qualifying provider's** profitability, will treat such an allowance as an expense in the **disclosure year** in respect of which that allowance was disclosed.

3.4.8 Interpretation of terms relating to term credit spread differential

- (1) 'Qualifying debt' means a line of debt-

- (a) with an original tenor greater than 5 years; and

- (b) issued by a **qualifying provider**.
- (2) 'Qualifying provider' means a **regulated provider** whose debt portfolio, as at the date of that provider's most recently published audited financial statements, has a weighted average original tenor greater than 5 years.

3.4.9 Term credit spread difference

- (1) 'Term credit spread difference' is determined in accordance with the formula-

$$T \times U,$$

where-

- (a) 'T' is whichever is the lesser of the amount determined in accordance with the formula-
 - (i) $0.00075 \times (\text{original tenor of the } \mathbf{qualifying\ debt} - 5)$; or
 - (ii) 0.00075×5 ;
- (b) 'U' is the book value in New Zealand dollars of the **qualifying debt** at its date of issue.
- (2) For the purpose of this clause, if the **qualifying debt** is issued to a **related party**, 'original tenor of the **qualifying debt**' means whichever is the shorter of the-
 - (a) tenor of the **qualifying debt**; or
 - (b) period from the **qualifying debt**'s date of issue to the earliest date on which its repayment is or may be required.

3.4.10 Methodology for estimating term credit spread differential

- (1) 'Term credit spread differential' is the amount determined in accordance with the formula-

$$(A \div B) \times C \times D,$$

where-

- (a) 'A' is the sum of the **term credit spread difference** and debt issuance cost re-adjustment;
- (b) 'B' is the book value of the **qualifying provider's** total interest-bearing debt as at the balance date of the provider's financial statements audited and published in the year in question;
- (c) 'C' is **leverage**; and
- (d) 'D' is, in relation to the **qualifying provider**, the average of-
 - (i) the sum of **opening RAB values** for all **core fibre assets** and the **opening RAB value** for the **financial loss asset**; and
 - (ii) the sum of **closing RAB values** for all **core fibre assets** and the **closing RAB value** for the **financial loss asset**.

- (2) For the purpose of subclause (3)(a), 'debt issuance cost re-adjustment' is the amount determined in accordance with the formula (which, for the avoidance of doubt, will be a negative number)-

$(0.01 \div \text{original tenor of the qualifying debt} - 0.002) \times \text{book value in New Zealand dollars of the qualifying debt at its date of issue.}$

SUBPART 5 **Quality dimensions**

3.5.1 Mandatory quality dimensions

- (1) In specifying quality standards for a **PQ determination**, the **Commission** must specify quality standards for the following **quality dimensions**:

- (a) **availability**, which may include:
 - (i) maximum **downtime**;
 - (ii) average **downtime**; and
 - (iii) notification to **access seekers** of **outages**; and
- (b) **performance**, which may include:
 - (i) **frame delay**;
 - (ii) **frame loss**;
 - (iii) **frame delay variation**; and
 - (iv) **port utilisation**.

3.5.2 Optional quality dimensions

- (1) The **Commission** may also specify quality standards for one or more of the following **quality dimensions**:
- (a) **ordering**, which may include the time to accept or reject a request;
 - (b) **provisioning**, which may include the time to provision **regulated FFLAS**;
 - (c) **switching**, which may include:
 - (i) the time to disconnect **regulated FFLAS** from a losing **access seeker** and connect to a gaining **access seeker**; and
 - (ii) the time to disconnect from one type of **regulated FFLAS** and connect to another;
 - (d) **faults**, which may include:
 - (i) incidence of faults, where "incidence of faults" is defined in an **ID** or **PQ determination**; and
 - (ii) time to **restore regulated FFLAS**; and
 - (e) **customer service**, which may include:

- (i) **end-user** connection satisfaction, where “end-user connection satisfaction” is defined in a **PQ determination**;
- (ii) missed appointments, where “missed appointments” is defined in a **PQ determination**; and
- (iii) the time to establish an **access seeker**, where “time to establish an **access seeker**” is defined in a **PQ determination**.

3.5.3 Quality requirements

- (1) In specifying the quality standards that a **regulated provider** must meet in a **PQ determination**, the **Commission** may set different requirements for different **regulated providers**.
- (2) The **Commission** may also set different quality standards with reference to:
 - (a) geography;
 - (b) **fibre network** architecture;
 - (c) **regulated FFLAS**, such as layer 1 and layer 2; and
 - (d) **end-users**, such as rural, urban, business or residential.

SUBPART 6 **Capital expenditure**

SECTION 1 **General rules and processes for capital expenditure proposals**

3.6.1 Overview of capex

Note: This clause is only a guide to the general scheme and effect of this subpart.

- (1) The **Commission** must determine a **capex allowance**, after **Chorus** submits a **capex proposal** that relates to one of the following **capital expenditure** categories:
 - (a) a **base capex proposal** meeting the specific requirements set out in section 2;
 - (b) a **connection capex baseline proposal** meeting the specific requirements set out in section 3; and
 - (c) an **individual capex proposal** meeting the specific requirements set out in section 4.
- (2) **Chorus** will submit one or more **capex proposals** to the **Commission** as follows:
 - (a) **Chorus** must submit a **base capex proposal** and a **connection capex baseline proposal** for a **regulatory period** before the start of that **regulatory period**; and
 - (b) **Chorus** may submit one or more **individual capex proposals** for a **regulatory period** at any time during that **regulatory period**.
- (3) After receiving a **capex proposal**, the **Commission** must determine the **capex allowance** for each **disclosure year** of a **regulatory period** in accordance with the

general evaluation requirements in Subpart 7 and any specific requirements set out for each category of **capex proposal** in sections 2, 3 and 4.

- (4) When the **Commission** determines a **capex allowance** for a **regulatory period**:
- (a) any **capex allowances** determined by the **Commission** before a **regulatory period** will be used to calculate the **maximum revenues** for that **regulatory period** in accordance with a **PQ determination**; and
 - (b) any **capex allowance** determined during or after a **regulatory period** will be added to the **building block allowable revenue** in accordance with a relevant **PQ determination**.

3.6.2 Capital contributions

- (1) All **proposed capex** must be net of **capital contributions**.

3.6.3 General certification requirements for capex proposals

- (1) If a **director** or **CEO** of **Chorus** is required to provide **certification** in relation to a **capex proposal** or other document, the **director** or **CEO** must each certify in writing, that having made all reasonable enquiries, it is their belief that:
- (a) the proposal or document being certified was derived from and accurately represents, in all material respects, the operations of **Chorus**;
 - (b) the information provided is true and correct; and
 - (c) the **capex proposal** being certified complies, in all material respects, with the requirements set out in this subpart.
- (2) A **director** or **CEO** of **Chorus** must notify the **Commission** as soon as reasonably practicable where:
- (a) the **director** or **CEO** has made a **certification** involving confirmation of a matter in accordance with subclause (1); and
 - (b) their belief, as certified in accordance with subclause (1), has changed before the **Commission's** decision in relation to the **capex proposal** in question.

3.6.4 General audit requirements for capex proposals

- (1) If an audit is required for a **capex proposal**, it must include a report by an **auditor** that states whether:
- (a) the financial and quantitative information provided in the **capex proposal** being audited has been developed from the underlying systems that were used to develop the forecasts in the **capex proposal**;
 - (b) appropriate accounting standards have been used in preparing the **capex proposal**; and
 - (c) all specific audit requirements for the relevant **capex category** of **capex proposal** or **auditor** report have been met.

3.6.5 General rule for information required for more than one purpose

- (1) Where **Chorus** must provide information related to **capex proposals, base capex information requests or connection capex information requests, regulatory templates, integrated fibre plans, connection capex annual reports, independent verification reports, auditor reports or certification documents**, the information requirement may be met by **Chorus** providing a reference to information in another document, provided that:
- (a) the reference provides the required information without the need for additional analysis, explanation or interpretation;
 - (b) the referenced information is provided or available to the **Commission** when the information is required; and
 - (c) in respect of each reference relied on, **Chorus** provides an index specifying:
 - (i) the relevant requirement being met; and
 - (ii) the precise location of the referenced information within the document relied on.

3.6.6 Information requirements for integrated fibre plan

- (1) At the same time as **Chorus** provides its **base capex proposal**, **Chorus** must provide an **integrated fibre plan** that includes the following component reports:
- (a) An overview: a summary and commentary on forecast expenditure for the **regulatory period**, including past expenditure and linkages with quality, **operating costs** and delivery performance.
 - (b) Quality report: a report on the linkages between forecast expenditure for the **regulatory period** and quality outcomes, including past delivery performance and linkages to expenditure.
 - (c) Governance report: a report describing **Chorus'** organisational governance, risk management and high-level asset management approach.
 - (d) Demand report: a report describing anticipated **regulated FFLAS** demand for the **regulatory period**, including linkages between **regulated FFLAS** uptake, data growth, and types of **regulated FFLAS**, including by reference to historic demand and past trends.
 - (e) Investment report: a report on the asset portfolios, the investment approach to each asset class, and investment plans for the next five **regulatory years**, including risks and linkages to the forecast expenditure for the **regulatory period**.
 - (f) Delivery report: a report on actual **capex project** and **programme** delivery and any linkages with **operating costs** and delivery performance (such as **fault** rates).

- (g) Engagement plan: a report outlining **Chorus'** proposed consultation on any aspects of their **integrated fibre plan** and **proposed capex** for the **regulatory period**.
- (2) For the **second regulatory period** and subsequent **regulatory periods**, the **integrated fibre plan** component reports must include updates and changes from the **integrated fibre plan** component reports for the previous **regulatory period**.

SECTION 2 Base capex

3.6.7 Base capex proposal process and timeframes

- (1) **Chorus** must submit a **base capex proposal** to the **Commission** at least 14 months before the start of the **regulatory period**.
- (2) The **base capex proposal** must:
 - (a) state any **base capex** that **Chorus** considers should be included in the **base capex allowance**;
 - (b) provide enough information to enable the **Commission** to evaluate the **base capex proposal** in accordance with Subpart 7, including:
 - (i) **regulatory templates** agreed under subclause (4) or specified under subclause (5); and
 - (ii) information required by the **Commission's base capex information request**; and
 - (c) be accompanied by the required assurance reports, including an **independent verification report, certification, and auditor** report in accordance with clauses 3.6.9-3.6.10.
- (3) Where **Chorus** considers information provided as part of the **base capex proposal** is confidential, it must include the proposed confidential information separately to the other information in the **base capex proposal** and clearly mark it as confidential.
- (4) The **Commission** and **Chorus** must use reasonable endeavours to agree, in respect of information in the **regulatory templates** for the relevant **regulatory period**;
 - (a) a list of **base capex sub-categories** and a description of each; and
 - (b) the form and content of the **regulatory templates**.
- (5) If no agreement is reached on one or more of the matters in subclause (4)(a)-(b), subject to subclause (7), the **Commission** must specify those matters and notify **Chorus**.
- (6) The **regulatory templates** must be agreed in accordance with subclause (4) or specified in accordance with subclause (5):
 - (a) for the **first regulatory period**; before the first **working day** in August which is at least 17 months before the start of the **regulatory period**; and
 - (b) for the **second regulatory period** and subsequent **regulatory periods**; before the first **working day** in March which is at least 22 months before the start of the **regulatory period**.

- (7) The **Commission** must have regard to the views **Chorus** expressed during discussion on the **regulatory templates** when specifying the matters in subclause (5).
- (8) For each **base capex sub-category** identified in the **regulatory template** as requiring geographic information, **Chorus** must provide a breakdown of its **capital expenditure** for the **base capex sub-category** by the following geographical locations:
 - (a) **Chorus UFB initiative** areas;
 - (b) non-**UFB initiative** areas (such as rural areas); and
 - (c) areas where **LFCs** other than **Chorus** have an **LFC fibre network**.
- (9) For **capital expenditure** identified in the **regulatory templates** as relating to both **regulated FFLAS** and **services that are not regulated FFLAS**, **Chorus** must provide information specified in the **base capex information request** on the cost allocator used and on **services that are not regulated FFLAS** to enable the **Commission** to assess the expenditure proposal as a whole.
- (10) The **Commission** must issue a **base capex information request** to **Chorus** related to the **base capex proposal** in accordance with information requirements set out in clause 3.6.8:
 - (a) for the first **regulatory period**, at least 16 months before the start of the **regulatory period**; and
 - (b) for the **second regulatory period** and subsequent **regulatory periods**, at least 22 months before the start of the **regulatory period**.

3.6.8 Base capex information request - information requirements

- (1) To the extent the **Commission** considers it relevant, the **base capex information request** may, without limitation, require information relating to any or all of the following areas:
 - (a) governance relating to proposed **capital expenditure**;
 - (b) historic **capital expenditure**;
 - (c) approach to forecasting **capital expenditure**;
 - (d) procurement, resourcing and deliverability;
 - (e) relevant financial information including evidence of efficiency improvements in proposed expenditure;
 - (f) **fibre asset** and **fibre network** information;
 - (g) competition effects, including specific information for **base capex sub-categories** that have potential impacts on competition in **regulated FFLAS** and other telecommunications markets;
 - (h) common costs and benefits with **services that are not regulated FFLAS**;
 - (i) linkages between **capex** and quality; and
 - (j) the extent of consultation by **Chorus** with its **access seekers** and **end-users**.

3.6.9 Base capex independent verification

- (1) For the **second regulatory period** and subsequent **regulatory periods**, the **base capex proposal** must be verified by an **independent verifier** approved by the **Commission**.
- (2) The intended independent verifier, scope and the terms and conditions proposed by **Chorus** for the **independent verification report** must be submitted to the **Commission** for approval prior to the start of the verification process.
- (3) The verification information submitted to the **Commission** in accordance with subclause (2) must include enough information for the **Commission** to be satisfied that:
 - (a) the verifier is **independent** and capable of undertaking the verification; and
 - (b) the terms and conditions of engagement and the scope of the **independent verification report** will provide the appropriate assurance needed to assess the **base capex proposal**.

3.6.10 Other assurance for base capex: certification and audit

- (1) At least 2 **directors** of **Chorus** must provide **certification** in relation to the **base capex proposal** in accordance with clause 3.6.3.
- (2) The **base capex proposal** must include a report by an **auditor** in accordance with clause 3.6.4.

3.6.11 Commission processes and rules for base capex allowance

- (1) After the **Commission** evaluates a **base capex proposal** in accordance with Subpart 7, the **Commission** must determine a **base capex allowance** for each **disclosure year** of that **regulatory period** no later than 6 months before the start of that **regulatory period**.
- (2) **Chorus** does not exceed the total **base capex allowance** for the **regulatory period** simply because the actual **capital expenditure** varies between **base capex sub-categories** or between **regulatory years** from the forecast **capital expenditure** set out in the **base capex proposal** for the **regulatory period**.
- (3) The **Commission** may determine that **capital expenditure** proposed within a **base capex proposal** should be proposed within an **individual capex proposal** if the **Commission** considers the proposed **capital expenditure**:
 - (a) is uncertain at the time **Chorus** submits the **base capex proposal**; and
 - (b) is the type of **capital expenditure** that should be restricted to a particular **project** or **programme** rather than being substitutable between **base capex sub-categories**.
- (4) If the **Commission** makes a determination in accordance with subclause (3), **Chorus** may submit an **individual capex proposal** for that **capital expenditure** in accordance with the staged application process specified in clause 3.6.21-3.6.26.

SECTION 3 Connection capex

3.6.12 General rules for connection capex allowances

- (1) The **Commission** will determine two components for the **connection capex allowance** as follows:
 - (a) a **connection capex baseline allowance** prior to the **regulatory period** in accordance with clause 3.6.19; and
 - (b) a **connection capex variable adjustment** after the final **connection capex annual report** of the **regulatory period** in accordance with clause 3.6.20.

3.6.13 Connection capex baseline proposal process and timeframes

- (1) **Chorus** must submit a **connection capex baseline proposal** to the **Commission** for a **regulatory period** at the same time that it submits the **base capex proposal** for that **regulatory period** at least 14 months before the start of the **regulatory period**.
- (2) A **connection capex baseline proposal** must:
 - (a) state any **connection capex** that **Chorus** considers should be included in the **connection capex baseline allowance**;
 - (b) provide enough information to enable the **Commission** to evaluate the **connection capex baseline proposal** in accordance with Subpart 7, including:
 - (i) **regulatory template** agreed under subclause (4) or specified under subclause (5); and
 - (ii) information required by the **Commission's connection capex information request**; and
 - (b) be accompanied by the required assurance reports, including an **independent verification report, certification**, and an **auditor** report in accordance with clauses 3.6.15-3.6.16.
- (3) Where **Chorus** considers information provided as part of the **connection capex baseline proposal** is confidential, it must include the proposed confidential information separately to the other information in the **connection capex baseline proposal** and clearly mark it as confidential.
- (4) The **Commission** and **Chorus** must use reasonable endeavours to agree, in respect of information in the **regulatory templates** for the relevant **regulatory period**:
 - (a) the form and content of the **regulatory templates**;
 - (b) the **connection types** relevant to the forecast expenditure and a description of each;
 - (c) forecast initial **connection unit rates by connection type**; and
 - (d) forecast connection volumes by **connection type**.

- (5) If no agreement is reached on one or more of the matters in subclause (4)(a)-(d), subject to subclause (7), the **Commission** must specify those matters and notify **Chorus**.
- (6) The **regulatory templates** must be agreed in accordance with subclause (4) or specified in accordance with subclause (5):
 - (a) for the **first regulatory period**, before the first **working day** in August which is at least 17 months before the start of the **regulatory period**; or
 - (b) for the **second regulatory period** and subsequent **regulatory periods**, before the first **working day** in March which is at least 22 months before the start of the **regulatory period**.
- (7) The **Commission** must have regard to the views **Chorus** expressed during discussion on the **regulatory templates** when specifying the matters in subclause (5).
- (8) The **Commission** must issue a **connection capex information request** to **Chorus** related to the **connection capex baseline proposal** in accordance with information requirements set out in clause 3.6.14:
 - (a) for the **first regulatory period**, at least 16 months before the start of the **regulatory period**; and
 - (b) for the **second regulatory period** and subsequent **regulatory periods**, at least 22 months before the start of the **regulatory period**.

3.6.14 Connection capex information request - information requirements

- (1) To the extent the **Commission** considers it relevant, the **connection capex information request** may, without limitation, require information relating to any or all of the following areas:
 - (a) governance relating to proposed **capital expenditure**;
 - (b) historic **capital expenditure**;
 - (c) approach to forecasting **capital expenditure**;
 - (d) procurement, resourcing and deliverability;
 - (e) relevant financial information including evidence of efficiency improvements in proposed expenditure;
 - (f) asset and network information;
 - (g) competition effects, including specific information for **capital expenditure** that may have potential impacts on competition in **regulated FFLAS** and other telecommunications markets;
 - (h) common costs and benefits with **services that are not regulated FFLAS**;
 - (i) linkages between **capex** and quality; and
 - (j) the extent of consultation by **Chorus** with its **access seekers** and **end-users**.

3.6.15 Connection capex baseline independent verification

- (1) For the **second regulatory period** and all subsequent **regulatory periods**, the **connection capex baseline proposal** must be verified by an **independent verifier** approved by the **Commission**.
- (2) The intended independent verifier, scope and terms and conditions proposed by **Chorus** for the **independent verification report** must be submitted to the **Commission** for approval before the start of the verification process.
- (3) The verification information submitted to the **Commission** in accordance with subclause (2) must include enough information for the **Commission** to be satisfied that:
 - (a) the verifier is **independent** and capability of undertaking the verification; and
 - (b) the scope and terms and conditions of engagement will provide the appropriate assurance needed to assess the **connection capex baseline proposal**.
- (4) The **independent verification report** must be submitted with the **connection capex baseline proposal**.

3.6.16 Other connection capex assurance: certification and audit

- (1) At least two **directors** of **Chorus** must provide **certification** in relation to the **connection capex baseline proposal**, in accordance with clause 3.6.3.
- (2) The **connection capex baseline proposal** must include a report by an **auditor** in accordance with clause 3.6.4.

3.6.17 Connection capex annual report

- (1) **Chorus** must provide a **connection capex annual report** for each **regulatory year** of a **regulatory period** to the **Commission** no later than 3 months after the end of each **regulatory year** of the **regulatory period**.
- (2) The **connection capex annual report** must include the following information:
 - (a) the **connection unit cost** by **connection type** for the **regulatory year** which is the subject of the annual report;
 - (b) actual connection volumes by **connection type** for the **regulatory year** which is the subject of the annual report;
 - (c) any updates to the forecast **connection unit costs** as agreed in clause 3.6.13(4)(c) or specified in clause 3.6.13(5) and the forecast connection volumes by **connection type** as agreed in clause 3.6.13(4)(d) or specified in clause 3.6.13(5) for the remaining **regulatory years** of the **regulatory period**.
- (3) The **connection capex annual report** must be accompanied by the required assurance, including the **certification** in accordance with clause 3.6.18(1) and an **auditor** report in accordance with clause 3.6.18(2).
- (4) Where **Chorus** considers information provided as part of the **connection capex annual report** is confidential, it must include the proposed confidential information

separately to the other information provided for the **connection capex annual report** and clearly mark it as confidential.

3.6.18 Connection capex annual report assurance processes

- (1) The **CEO of Chorus** must provide a **certification** for the **connection capex annual report**.
- (2) The **connection capex annual report** must be audited in accordance with clause 3.6.4.

3.6.19 Commission processes and timeframes for determining connection capex baseline allowance

- (1) After the **Commission** evaluates a **connection capex baseline proposal** in accordance with Subpart 7, the **Commission** must determine a **connection capex baseline allowance**, no later than 6 months before the start of that **regulatory period**.
- (2) For the purposes of subclause (1), the **connection capex baseline** determination must include:
 - (a) the **connection capex baseline allowance** by **connection type** for each **disclosure year** of the **regulatory period**;
 - (b) the **connection unit rates**, by **connection type**, used to calculate the **connection capex baseline allowance** for each **disclosure year** of the **regulatory period**; and
 - (c) the forecast volumes, by **connection type**, used to calculate the **connection capex baseline allowance** for each **disclosure year** of the **regulatory period**.

3.6.20 The connection capex variable adjustment

- (1) A **connection capex variable adjustment** will be determined at the end of the **regulatory period** after the **Commission** receives the **connection capex annual report** for the last **regulatory year** of the **regulatory period**.
- (2) The **connection capex variable adjustment** will be the difference between:
 - (a) the **connection capex baseline allowance** for the **regulatory period** which is based on forecast connection volumes; and
 - (b) a **capital expenditure** amount that is based on actual connection volumes by **connection type** for the **regulatory period** multiplied by the **connection unit rates** used in determining the **connection capex baseline allowance** for that **connection type**.

SECTION 4 Individual capex proposals

3.6.21 Overview of individual capex proposal process and timeframes

- (1) **Chorus** may apply to the **Commission** to determine an additional **capex allowance** for a **regulatory period** at any time during that **regulatory period** by submitting an **individual capex proposal** in accordance with the staged application process specified in subclause (4).

- (2) An **individual capex proposal** must, in relation to a **regulatory period**, state any **individual capex** that **Chorus** considers should be included in the **individual capex allowance** for that **regulatory period**.
- (3) The **individual capex proposal** must meet the following requirements:
 - (a) the proposed **capital expenditure** must relate to one or more **base capex sub-categories** included in the **base capex proposal** for that **regulatory period**;
 - (b) the proposed **individual capex** must relate to a **project** or **programme**, where the forecast **capital expenditure** for **regulated FFLAS** on that **project** or **programme** amounts to at least \$5 million;
 - (c) the **individual capex proposal** is needed because at the time when the **base capex proposal** for that **regulatory period** was submitted to the **Commission**, either:
 - (i) it would have been unreasonable to expect **Chorus** to accurately forecast the **capital expenditure**, or timing of, that **project** or **programme**; or
 - (ii) the **Commission** determined that **capital expenditure** proposed within the **base capex proposal** should instead be proposed within an **individual capex proposal** in accordance with clause 3.6.11(3); and
 - (d) the proposed **individual capex** must be additional to the **base capex allowance** and must only be used for the **individual capex project** or **individual capex programme** to which that **individual capex proposal** relates.
- (4) Where **Chorus** intends to submit an **individual capex proposal** to the **Commission**, the following staged application process will occur:
 - (a) a notification stage, where **Chorus** must notify the **Commission** of its intention to submit an **individual capex proposal** and provide an **individual capex design proposal** to the **Commission** for approval in accordance with clause 3.6.22; and
 - (b) if the **Commission** approves **Chorus' individual capex design proposal**, a final proposal stage, where **Chorus** must submit to the **Commission** an **individual capex proposal** in accordance with clause 3.6.24 that is consistent with the **individual capex design proposal**.

3.6.22 Notification stage - individual capex design proposal

- (1) **Chorus** must notify the **Commission** in writing that it intends to submit an **individual capex proposal** to the **Commission** and must include an **individual capex design proposal** with the notice.
- (2) The **individual capex design proposal** must include a description of:

- (a) key parameters of the **individual capex project** or **individual capex programme** that the proposed **capital expenditure** relates to in accordance with subclause (3);
 - (b) the proposed information to be provided to the **Commission** in the final **individual capex proposal** based on the **individual capex** information requirements in clause 3.6.25;
 - (c) the assurance processes to be undertaken, based on the **individual capex** requirements in clause 3.6.26; and
 - (d) the proposed timeframe for **Chorus** to submit the final proposal.
- (3) For the purposes of subclause (2)(a), the key parameters in the **individual capex design proposal** must include:
- (a) the need for investment and the timing of the **capital expenditure**;
 - (b) the assumed technical parameters for the **individual capex project** or **individual capex programme**;
 - (c) any relevant technology development plans;
 - (d) identification of alternative options and any impact on quality and previously determined **base capex allowance** and **operating expenditure**;
 - (e) a proposed consultation plan and explanation of the degree of consultation required; and
 - (f) the intended independent verifier, the terms and conditions of the verifier's engagement and the scope of the **independent verification report**, including:
 - (i) enough information to demonstrate that the verifier is **independent** and capable; and
 - (ii) enough justification that the scope and terms of the intended **independent verification report** will be commensurate to the size and complexity of the **individual capex project** or **individual capex programme**.

3.6.23 Commission approval of the individual capex design proposal

- (1) Within one month of the **Commission** receiving the **individual capex design proposal** from **Chorus**, the **Commission** must do one of the following:
 - (a) approve the **individual capex design proposal**;
 - (b) approve the **individual capex design proposal** with conditions; or
 - (c) decline the **individual capex design proposal**.
- (2) If the **individual capex design proposal** is not approved, or approved with conditions not acceptable to **Chorus**, **Chorus** may resubmit a revised **individual capex design proposal** at a later date.

3.6.24 The final individual capex proposal

- (1) Where the **Commission** approves or approves with conditions an **individual capex design proposal** in whole or in part, **Chorus** must provide an **individual capex proposal** in accordance with the **approved timeframes** specified in the **individual capex design proposal**.
- (2) The **individual capex proposal** must be consistent with the key parameters, information requirements, assurance processes and any conditions approved by the **Commission** in relation to the **individual capex design proposal**.
- (3) The proposed **individual capex** must be net of any determined **base capex allowance**.

3.6.25 Individual capex minimum information requirements

- (1) The information included in the **individual capex proposal** must be based on the information approved for the **individual capex design proposal** and may include the following:
 - (a) enough information for the **Commission** to assess the **individual capex proposal** against the **capital expenditure objective**, having regard to the **assessment factors**;
 - (b) evidence that appropriate internal governance including application of related policies and processes has been applied;
 - (c) economic analysis undertaken to justify the **individual capex project** or **individual capex programme**;
 - (d) any technical information and standards relied upon in the development of the expenditure application;
 - (e) evidence of any consultation on the **individual capex project** or **individual capex programme**;
 - (f) information to demonstrate the fulfilment of any **independent verification, certification**, audit, and consultation requirements;
 - (g) an explanation of the impact the expenditure will have on quality and any previously determined **base capex allowance** or **operating expenditure**; and
 - (h) any expert reports or advice that contributed to the **individual capex proposal**.

3.6.26 Individual capex assurance requirements: independent verification

- (1) An **individual capex proposal** must be verified by an **independent verifier** providing an **independent verification report** as approved in the **individual capex design proposal**.
- (2) An **individual capex proposal** must be certified by the **CEO** of **Chorus** in accordance with clause 3.6.3.

- (3) An **individual capex proposal** must be audited in accordance with clause 3.6.4 and must include a statement from the **auditor**:
- (a) that the **individual capex proposal** complies, in all material respects, with the agreed information requirements and key parameters in the **individual capex design proposal**; and
 - (b) on whether the proposed **individual capex** is additional to and not a substitute for the determined **base capex allowance**.

3.6.27 Commission processes for final individual capex proposal

- (1) The **Commission** must evaluate the final **individual capex proposal** in accordance with Subpart 7 and do one of the following:
- (a) determine the **individual capex allowance**;
 - (b) determine the **individual capex allowance**, with conditions; or
 - (c) decline the **individual capex proposal**.
- (2) If the **Commission** determines an **individual capex allowance** for a **regulatory period**, the determination must include:
- (a) the **individual capex allowance** for that **regulatory period**;
 - (a) any reporting requirements; and
 - (b) any other conditions of the **Commission's** determination of that **individual capex allowance**.
- (3) The **Commission** may consult on the **individual capex proposal** if satisfied that the consultation is for the long-term benefit of **end-users**.

SUBPART 7 **Capital expenditure evaluation by the Commission**

SECTION 1 **General rules for Commission determination processes**

3.7.1 Commission determination of capex proposals

- (1) After receiving a **capex proposal**, the **Commission** must determine the **capex allowance** in relation to each **capex proposal** in accordance with the general evaluation criteria in section 2 and any specific requirements set out for each category of **capex proposal** in sections 2, 3 and 4 of Subpart 6.
- (2) A determined **capex allowance** must be net of **capital contributions**.

3.7.2 Consequences of evaluation and other process timeframes not being met by Commission

- (1) None of the **Commission's** functions or decisions described in this determination are invalidated on account of the **Commission's** failure to meet any timeframes applying to the **Commission** specified in this determination.
- (2) Notwithstanding subclause (1), the **Commission** will, as soon as reasonably practicable after it believes that a timeframe applying to the **Commission** is not likely

to be met or has not been adhered to, notify **Chorus** and, where relevant, interested persons, of the new timeframe that applies.

3.7.3 Publication of determinations

- (1) The **Commission** will publish all determinations that it is required to make under section 2-4 of Subpart 6:
 - (a) on the **Commission's** website; and
 - (b) no later than 1 month after having made them.

3.7.4 Commission consultation

- (1) After receiving a **base capex proposal** or a **connection capex baseline proposal**, the **Commission** must, for each **capex proposal**:
 - (a) if deemed necessary by the **Commission**, seek the views of any person the **Commission** considers has expertise on a relevant matter;
 - (b) publish the relevant **capex proposal** or application, subject to withholding any information the **Commission** considers commercially sensitive or otherwise confidential;
 - (c) make and publish a draft determination or determinations;
 - (d) seek the written views of interested persons on anything so published; and
 - (e) seek the written views of interested persons on others' submissions.
- (2) After receiving an **individual capex proposal**, the **Commission** may take the actions referred to in subclauses (1)(a)-(e).
- (3) Where the **Commission** takes any of the actions referred to in subclauses (1)(a)-(e) or (2), the **Commission** may do so in accordance with such timeframes and processes as it considers appropriate.

SECTION 2 Evaluation criteria – expenditure objective and assessment factors

3.7.5 Commission evaluation

- (1) The **Commission** must evaluate a **capex proposal** by:
 - (a) considering whether the proposed **capital expenditure** meets the **capital expenditure objective** and reflects **good telecommunications industry practice**; and
 - (b) having regard to the **assessment factors** in clause 3.7.6 when considering whether a **capex proposal** has met the **capital expenditure objective**.
- (2) A **capex proposal** meets the **capital expenditure objective** if the expenditure reflects the efficient costs that a prudent **fibre network operator** would incur to deliver **regulated FFLAS** of appropriate quality, during the relevant **regulatory period** and over the longer term.

3.7.6 Assessment factors

- (1) To the extent the **Commission** considers it relevant, the **Commission** must consider the following **assessment factors** when evaluating a **capex proposal**:
- (a) whether the **proposed capex** complies with all applicable legal and regulatory obligations associated with the provision of **regulated FFLAS**;
 - (b) the potential impact of the proposed **capital expenditure** on actual or potential competition in any telecommunications market;
 - (c) the relationship between the **proposed capex** and quality outcomes;
 - (d) the extent and effectiveness of consultation and engagement with stakeholders;
 - (e) the deliverability of the **proposed capex** and the feasibility of implementation;
 - (f) mechanisms for controlling actual **capital expenditure** with respect to the **proposed capex** and achieving the quality outcomes;
 - (g) the degree of uncertainty within the **proposed capex**;
 - (h) the extent that a risk-based approach has been applied;
 - (i) the impact that the **proposed capex** has on layer 1 **regulated FFLAS**;
 - (j) the dependency and trade-off between the proposed **capital expenditure** and related **operating expenditure** to ensure least whole of life cost for managing assets and cost-efficient solutions;
 - (k) the accuracy and reliability of data;
 - (l) the reasonableness of the:
 - (i) key assumptions relied upon;
 - (ii) methodologies and information used;
 - (iii) planning and technical standards relied upon;
 - (iv) models used to develop the **capital expenditure** forecasts; and
 - (v) proposed approach to procurement of goods and services;
 - (m) the extent of:
 - (i) options, alternatives, sensitivity analysis and impact analysis undertaken investigated and assessed; and
 - (ii) consideration of historic rates of investment; and
 - (n) any other factors the **Commission** considers relevant.

**SCHEDULE A MINIMUM LEVELS OF SPECIFICITY TO DESCRIBE
ASSETS IN RAB**

Table A.1: Minimum levels of specificity to describe assets in RAB

Category of asset	Minimum levels of specificity to describe assets
Network layer	Layers 1 and 2
Asset class	Includes feeder fibre, distribution fibre, roadside cabinet, customer premises, and equipment
Geographic location	Address, building, area
Shared with other parties	Shared with entity #
Shared with other services	Shared with power lines, copper telco cables/assets
Special assets	Assets supporting unbundling, assets relating to a point of interconnection
Non-UFB initiative assets	Core fibre assets not employed in the provision of UFB FFLAS