# Cross-submission in response to the Commerce Commission's fibre regulation emerging views

31 July 2019

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# OVERVIEW

1 This cross-submission responds to submissions on the Commerce Commission's consultation paper *Fibre Regulation Emerging Views* (**EV Paper**) released on 21 May 2019.

2 We appreciate the opportunity to provide our views on other parties' submissions. This cross-submission does not attempt to address all the arguments raised in submissions but seeks to cover key themes and address arguments of particular importance.

3 In Professor Yarrow's expert report,[1] provided with our submission, he commented that the fall in Chorus' share price on the release of the EV Paper is a cause for "*reasonable worry*" and encouraged the Commission to seek to "*understand the reasons for it*". The investor submissions provide those reasons with a particular theme of concern about the Commission's overarching view on risk and return. The quotes below illustrate that point:

> **L1 Capital**[2] **-** *L1 believes that the Commerce Commission's approach to cost of capital and risk was a shock to the market as evidenced by the market reaction and commentary from the investment community*.
>
> **Ubique Asset Management**[3] – *We do not believe that this level of return is a sufficient 'through the cycle return' to encourage new capital investment to the sector and it does not take into account the business risks faced by CNU.*
>
> **Paradice Investment Management**[4] – *Our analysis and feedback from other companies suggests the Chorus network (and others like it) would not have been constructed for a WACC return of 5%. This lack of incentive is important in the context of attracting future development, and not increasing of sovereign risk around retrospective adjustments to return on sunk capital*.

4 These comments, and investors' underlying detailed submissions, represent the reality of the investment environment for Chorus. We see this reflected in the submissions of other local fibre companies (**LFCs**) and investors in electricity networks. They are generally aligned on cost of capital and the management of risk in the regime, and face significant infrastructure investment decisions in a regulated environment.

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[1] Professor George Yarrow (16 July 2019), *Questions relating to the regulation of fibre fixed line access services (FFLAS) in New Zealand*.

[2] L1 Capital (16 July 2019), *Submission in response to the Commerce Commission's emerging views paper*, p3.

[3] Ubique Asset Management (15 July 2019), *Submission in response to the Commerce Commission's emerging views paper*, p1.

[4] Paradice Investment Management (10 July 2019), *Submission in response to the Commerce Commission's emerging views paper*, p2.

5 We acknowledge an underlying theme in the submissions from retail service providers (**RSPs**) relating to a lack of certainty as we transition to the new regulatory framework. We are moving from a framework where contract terms are settled and, depending on whether services are copper or fibre-based, the Commission or Crown Infrastructure Partners (**CIP**) have played prominent roles in dealing with any changes to those terms. As we've said previously, it's important that the transition occurs smoothly without shocks for anyone. While we note that this transitional period creates considerable uncertainty for both RSPs and Chorus, we also appreciate that it places a greater responsibility on us to effectively and transparently manage our portfolio of services.

6 Given a number of submitters are themselves infrastructure investors, we were surprised by the apparent inconsistency in proposing that Chorus should be exposed to more competition and that this should not be reflected in our cost of capital. This is unlikely to reflect how they, and their investors, consider risk and return.

7 Assertions from mobile network operators that our initial asset valuation (**initial RAB**) should include only the incremental cost of fibre build is analogous to claiming that the cost of termination on their networks should only take into account the incremental cost of the 4G Radio Access Network. This is unlikely to be consistent with any previous advocacy on the regulated Mobile Termination Access Services.

## Areas of alignment in submissions

8 There is, however, alignment amongst submissions on a number of topics raised in the Commission's EV Paper. For example:

8.1 **Economic principles** – There is general support for the Commission adopting its proposed three key economic principles: real financial capital management (**FCM**), allocation of risk and the asymmetric consequences of over- and under-investment to guide the design of the input methodologies (**IMs**).

8.2 **Initial RAB – supplier-led process** – LFCs are aligned and support a supplier-led process for establishing the initial RAB, as it reduces compliance costs and is a proportionate approach to regulation.

8.3 **Crown financing** – LFCs and investors agree Crown financing is not zero cost. While it doesn't attract an interest rate, Crown financing must be repaid and there are numerous obligations on fibre suppliers associated with it. In the expert report provided with our submission, Incenta[5] concludes:

> *Our finding is that the risk that is absorbed by the Crown is principally debt-like, which follows from the fact that Chorus's future obligations in relation to the funds (i.e. to repay or commence servicing) are tied to the original principle, rather than to the future value of the FFLAS activities. A corollary of this is that it would be expected that Chorus would bear a residual risk in relation to the Crown-financed investments.*

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[5] Incenta Economic Consulting (July 2019), *Chorus's actual financing cost for Crown-financed investment*, at [6].

8.4 **Cost of capital – methodology** – While there is general agreement for the Commission to use Part 4 methodology as a starting point for calculating the cost of capital, we agree with Electricity Networks Association (**ENA**) that the Commission is required to take into account the differences in specific elements of the FFLAS methodology, in accordance with the purpose statement.

8.5 **Depreciation of the financial loss asset** – LFCs agree it is appropriate for depreciation of the Crown financed assets to be included in the BBM. We also agree with Spark that if the Commission recognises depreciation on Crown financed assets, it should be done in a way that achieves NPV=0.

8.6 **Cost of capital – asset beta** – LFCs and investors agree the asset beta comparator set isn't representative and is inconsistent with ranges derived for NBN Co and Openreach.

8.7 **Consultation on price-quality** – There is general agreement on a requirement for Chorus to consult on price-quality proposals on an enduring basis.

8.8 **Treatment of taxation** – There is alignment from those who submitted on this topic that the Commission's proposed treatment of taxation methodology on an enduring basis is appropriate.

## Our response to matters others have raised

9 Some submissions continue to raise issues that are incorrect, for the reasons explained below:

9.1 **Returns to investors** – Chorus does not provide excessive returns to investors, nor have we made the level of financial returns suggested by some submitters. If it were possible to make such high returns with fibre deployments, policy-makers throughout the world would not be intervening to encourage operators to invest in fibre.

9.2 **Recovery of investment** – There is no double recovery of costs shared between copper and fibre services. The Commission's task here is to implement a fibre regulatory regime. Where assets are used for both copper and fibre services, only an appropriate portion of shared costs will be allocated to the fibre fixed line access services (**FFLAS**), and the method used to determine copper prices means that only a share is recoverable from those services. Chorus should have the opportunity to recover costs related to providing FFLAS and be compensated for relevant financial losses in accordance with the legislation.

9.3 **Compensation** – Chorus is not asking the Commission to allow double compensation for risks that we face. Our proposal to address Type II asymmetric risks ensures overall coherence with real FCM and avoids double compensation for risks.

9.4 **Incentives** – Our core business is the provision of fibre services and our clear commercial incentive is to promote fibre uptake, despite some submitters suggesting otherwise. This is demonstrated by our considerable (and

successful) efforts to encourage fibre uptake – by promoting migration as an open access wholesale provider and providing attractively priced products for fibre (relative to copper). We have made significant investment ahead of demand. Given our exposure to Type II asymmetric risk we have every incentive to promote fibre uptake to recover our costs.

9.5 **Economic principles** – We see no justification for a pricing principle as we are subject to a revenue cap to constrain our return across our product portfolio and have a number of other pricing constraints including geographically consistent pricing. We remain of the view only the Commission's three proposed economic principles, adopted from Part 4, are relevant.

9.6 **Initial RAB** – The Telecommunications Act (**Act**) specifies the methodology for calculating the value of the initial RAB, including the financial loss asset. The Act requires the Commission to include in the calculation pre and post-2011 fibre assets, shared assets between fibre and copper services and calculate accumulated unrecovered returns, adjusted to reflect the present value.

9.7 **Financial loss asset** – Some submitters question the legislative requirements by arguing pre-2011 assets should be excluded from the RAB, and that the Commission should take copper revenues into account when assessing Chorus' financial losses. However, this would be inconsistent with the Act. The methodology for calculating the initial RAB, including the financial loss asset, is largely specified in the Act. In addition, virtually any new infrastructure project would make a 'financial loss' as defined in the Act over the first decade of its operation. So contrary to some submissions, there is nothing unexpected about the existence of financial losses for the Ultra-fast Broadband (**UFB**) initiative.

9.8 **Rate of return on investment (RROI) for financial losses** – The term of the risk-free rate application to the calculation of financial losses should match the period for which the fibre prices have been set – from December 2011 to the implementation date. The prevailing risk-free rates immediately prior to December 2011 should also be applied. This is consistent with the Commission's established approach to setting the risk-free rate in Part 4.

9.9 **Cost allocation** – There is no justification for departing from the Part 4 rules. The cost allocation rules were designed to achieve outcomes consistent with workable competition, including preventing allocations that distort competition. We note we are also subject to competition law and a number of other regulatory mechanisms.

9.10 **Cost of capital – service-wide approach** – There is no evidence to suggest the Commission should depart from a service-wide approach to setting the mid-point estimate of the FFLAS cost of capital (before applying an uplift). We disagree with the suggestion that the Commission should set a firm-specific asset beta, and that other LFCs' FFLAS are exposed to higher systematic risk compared to Chorus' FFLAS.

9.11 **Cost of capital – uplift** – Some RSPs argue against a cost of capital uplift, making comparisons to copper pricing, and stating there is no risk of under-investment due our contractual obligation to build the fibre network. We

provided evidence in our submission on the increased risk of investing in fibre over copper, as well as the risks taken on by partnering with the Crown. There is a direct and strong relationship between allowable cost of capital and Chorus' incentives for efficient investment, supporting the case for an uplift. In addition to further contracted UFB investment, significant ongoing discretionary investment will be required to keep up with rapidly evolving consumer needs and expectations.

9.12 **Asset stranding risk** – While RSPs support the real FCM principle, there are some contradictory statements claiming that the Commission doesn't have a role in keeping Chorus whole for the period of regulation. However to mirror the outcomes of workably competitive markets (**WCM**) consistency with real FCM needs to be achieved over the life of the assets, which requires consideration of the potential consequences of deregulation. This view is supported by our advice from Professor Yarrow.[6]

9.13 **Quality dimensions** – We think the new framework establishes the right incentives to ensure appropriate terms are put in place for other services, recognising that there is a price-quality trade-off that will need to be balanced. However some RSPs have suggested a prescriptive approach to quality regulation, including Commission oversight and approval of wholesale services agreements (**WSA**). We acknowledge RSPs' underlying concern that there is uncertainty at this stage around non-price terms when the NIPA falls away as we enter the new regime. We also acknowledge we need to work with our customers to provide greater clarity as soon as we can. We are moving to an incentives-based framework and departing from previous regimes involving detailed prescription of non-price terms. Non-price terms will be baselined by anchor service and direct fibre access service (**DFAS**) regulations.

9.14 **Price-quality** – Part 6 is a price-quality regime, so while RSPs focus on 'quality', it's important to factor in the 'price' implications. For the first regulatory period (**RP**), policymakers included requirements for existing UFB prices, specifications and conditions be carried over into the new framework for DFAS and anchor services. The intention being both price and quality remain stable for RP1.

9.15 **Type II asymmetric risks** – Our ability to manage asset risk stranding is affected by the regulatory framework. We outline in our submission the key risks Chorus faces in the new regulatory regime, appropriate mechanisms to mitigate these risks and the case for compensation.

## The structure of our cross-submission

10 A number of the matters raised by submitters have already been set out at length in our earlier submissions. We set out in the **Appendix** references to the sections of our submissions which address these points.

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[6] Professor George Yarrow (16 July 2019), *Questions relating to the regulation of fibre fixed line access services (FFLAS) in New Zealand*.

11 Our submission responds to new issues as follows:

- **Part 1** – Economic principles;
- **Part 2** – Asset valuation and cost allocation; and
- **Part 3** – Cost of capital and Type II asymmetric risks.

# PART 1: KEY ECONOMIC PRINCIPLES

**Pricing efficiency principle**

- There is no justification for a pricing principle as we are subject to a revenue cap to constrain our return across our product portfolio and a number of other pricing constraints. We remain of the view only the Commission's three proposed economic principles, adopted from Part 4, are relevant.

**Pricing of layer 1**

- The legislation supports an unbundled layer 1 service being made available on commercial terms for RP1, subject to the provisions in our Deed of Open Access Undertakings for Fibre Services. Therefore, an unbundling IM is not required, nor in fact permitted, to the extent that it seeks to elaborate on requirements not in Part 6.

12 There is broad alignment on the Commission's proposal to adopt the three key economic principles that apply in Part 4 which are: real FCM, allocation of risk and the asymmetric consequences of over and under-investment.

13 The difference between submitters is not on the principles themselves but how they should apply in particular circumstances to the regulation of FFLAS. Our submission noted that FFLAS has a different pricing lifecycle to those of traditional utility services. This arises because of the way service improvements are embodied in capital investment and is a core differentiator between telecommunications services and traditional Part 4 services. The need to address this point of difference was not addressed by the other submitters.

14 We disagree with the submitters who advocate for additional economic principles.

## Pricing efficiency principle

### *Coherence of the framework*

15 We don't support the inclusion of an additional pricing efficiency principle as proposed by some submitters. As we set out in our previous submissions, this is unnecessary because:

15.1 Part 6 is based on revenue control and not price control – we will be exposed to an overarching revenue cap;

15.2 There are several other constraints on Chorus' pricing freedom in Part 6, including anchor service regulation and geographically consistent pricing.

These constraints are not cost-based.[7] Instead they are intended to reflect social and policy objectives rather than efficiency objectives; and

15.3 We continue to face pricing constraints that sit outside Part 6, including non-discrimination, equivalence of inputs (**EOI**), and Commerce Act requirements.

16 It's unclear how any pricing efficiency principle would operate together with these constraints. Defining such a principle in this context would be complex and would likely introduce unforeseen consequences.

17 A pricing efficiency principle is likely to interfere with Chorus' ability to recover its capital in the manner which typically occurs in WCMs.

18 We agree the Commission may conduct a price-quality review and a review of anchor services after RP1. This would be the appropriate point to consider whether pricing principles should apply.[8]

## Our incentives

19 Our core and ongoing business is the provision of fibre services. Our clear commercial incentive is to encourage consumers to migrate to fibre as soon as possible to grow our core business and reduce the recovery risk associated with our fibre assets. Migration will also bring forward copper withdrawal and avoid the ongoing costs of operating two networks in some regions.

20 In their expert paper submitted on behalf of the Commission, Ingo Vogelsang and Martin Cave[9] comment that to ensure Chorus doesn't set higher-than-efficient prices, the revenue cap needs to be binding and expected to remain binding.

21 However, due to the realities we face in entering the regime, it is likely that, for RP1, the market will not support prices sufficient to allow Chorus to earn up to the revenue cap. Historically we have made significant investment ahead of demand and current products and pricing were contractually required to be attractive relative to copper to encourage fibre uptake, constraining our ability to recover more revenue up-front.

22 Looking forward, Chorus faces a risk as to whether we will be able to recover our costs. The dynamic nature of our industry, and the possibility of future market developments, mean we face a risk to our ability to receive a return on and of capital over the lifetime of our assets. This risk is compounded by the cumulative effect of the existing regulatory constraints we face.

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7 See Chorus (1 February 2019), *New regulatory framework for fibre: cross-submission on Commission's proposed approach*, at [57].

8 See Chorus (1 February 2019), *New regulatory framework for fibre: cross-submission on Commission's proposed approach*, at [27].

9 Ingo Vogelsang and Martin Cave (16 May 2019), *Pricing under the new regulatory framework provided by Part 6 of the Telecommunications Act.*

23 Given these factors, we have a strong incentive – in the absence of a pricing efficiency principle – to set prices that:

23.1 Encourage the uptake of fibre; and

23.2 Encourage consumers to opt for higher value products.

24 The evidence of consumer migration and Chorus' efforts to encourage migration, as well as the absence of congestion on the Chorus network, are consistent with this alternative incentive.

25 The interests of consumers will be best served if Chorus has flexibility to set prices across non-anchor services that align to demand responsiveness or willingness to pay, within the overarching constraints of the revenue cap.[10] Product differentiation enables digital inclusion and greater adoption of fibre, which leads to more connections and a lower average price per fibre for consumers. In addition, as the Commission has acknowledged when discussing pricing principles in the Part 4 context, suppliers have better information than the Commission when it comes to setting efficient prices. Given the complexity of the regulatory framework as it relates to prices, and the market dynamics, that proposition applies even more clearly in our case.

26 In contrast, introducing further constraints on our pricing flexibility through an additional pricing efficiency principle would mean our recovery risk is greater. This has implications for the level of compensation required for Type II asymmetric risk.

## Pricing of layer 1

27 We disagree with the view put forward by one submitter[11] that Chorus should be subject to an unbundling IM.[12] The legislation supports the point-to-multipoint layer 1 (**PONFAS**) service being made available on commercial terms for RP1, subject to the provisions of our Deed of Open Access Undertakings for Fibre Services. The Commission's role under Part 6 for PONFAS commences after RP1. It's important the Commission doesn't predetermine any outcomes of the review before then. Otherwise, the application of the provisions of the Fibre Deed don't fall within the scope of Part 6, and are therefore not a proper matter for IMs.

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[10] See Chorus (1 February 2019), *New regulatory framework for fibre: cross-submission on Commission's proposed approach*, at [58].

[11] Vodafone (16 July 2019), *New regulatory framework for fibre: submission on fibre regulation emerging views*, p14.

[12] See Chorus (1 February 2019), *New regulatory framework for fibre: cross-submission on Commission's proposed approach,* at [58].

# PART 2: ASSET VALUATION AND COST ALLOCATION

**Section 177 – initial value of fibre assets**

- Section 177 prescribes the methodology for setting the initial value of a fibre asset.
- The concept of a 'fibre asset' expressly includes:
  - Assets owned by Chorus before 1 December 2011, as per the value in our financial statements; and
  - Shared assets in the definition.
- Section 177 requires a fibre asset representing Chorus' financial losses attributable to UFB as at implementation date.
- The Commission must take into account mandatory relevant considerations in calculating the financial loss asset.
- Section 177 requires the Commission to recognise costs incurred by Chorus in providing FFLAS under the UFB initiative.
- Financial losses must take account of any accumulated unrecovered returns on investment relating to the UFB initiative – there is no requirement or provision in the Act for these losses to be off-set with non-UFB returns.
- The Commission is required to calculate accumulated unrecovered returns, adjusted to reflect the present value.

**Financial loss calculation**

- Assets shared between copper and fibre services should be included in the calculation, with an appropriate allocation for the fibre costs.
- Contrary to some submissions, there is no formal burden of proof. Instead, section 177 provides that it is for the Commission to determine the value of financial losses.
- The cost of capital on financial losses should be included.

**Cost allocation**

- There is no reason to revisit the use of the Part 4 approach in the context of the fibre regulatory framework. The cost allocation rules were designed to achieve outcomes consistent with workable competition and remain consistent with the purpose of Part 6 regulation.

## Asset Valuation – financial loss asset

### *Section 177 – initial value of fibre assets*

28 The methodology for calculating the initial valuation (both pre and post-2011 assets), and including the financial loss asset, is largely determined by section 177 of the Act.

29 Contrary to some RSP submissions, the legislation makes it clear that in the calculation of the financial losses:

29.1 Pre-2011 assets should be included;

29.2 Costs shared between copper and fibre should be included in the calculation. Allocating an appropriate portion of shared costs to FFLAS does not result in double recovery – it's critical for Chorus to have the opportunity to recover costs and be compensated for relevant losses;

29.3 There is no formal burden of proof on Chorus. Instead, section 177 provides that it is for the Commission to determine the value of the financial losses; and

29.4 Cost of capital should be applied to the financial losses and does not over-compensate Chorus.

30 Section 177 of the Act prescribes:

30.1 The methodology for calculating the value of the fibre assets (including pre-2011 and assets shared with non-FFLAS); and

30.2 That financial losses attributable to UFB are to be calculated.

31 Any submissions suggesting the Commission can ignore the financial losses incurred by LFCs' participation in the UFB initiative are inconsistent with the Act. The legislation recognises that the UFB initiative involved committing significant expenditure well ahead of demand and that they should be compensated for any losses incurred as a result.

32 Section 177 requires the Commission to include assets in the financial loss calculation irrespective of when the assets were acquired or constructed, or whether they're used to provide FFLAS only or shared with non-FFLAS.

### *Pre-2011 fibre assets*

33 The Commission's role is to calculate financial losses using the methodology set out in the Act and it has no discretion to exclude pre-2011 fibre assets. The Act does not give the Commission discretion to exclude losses on the basis that an asset reused for UFB was created or acquired before 1 December 2011. We therefore disagree with the submissions suggesting that assets constructed or acquired before 1 December 2011 shouldn't be included in the financial loss calculation.

34 A submitter[13] advocates that the requirement under section 177(3), for the Commission to take into account unrecovered returns on investment made under the UFB initiative, excludes pre-2011 investments. They say these investments could not have been "*made by the provider under the UFB initiative*". This ignores the reality that the acquisition of pre-2011 assets by Chorus was itself undertaken as a condition of, and pursuant to, the UFB initiative. This reality is reflected in section 177 in a number of ways. First, section 177 defines 'fibre assets' as *both* those assets that are:

(a) *constructed or acquired by a regulated fibre service provider; and*

(b) *employed in the provision of fibre fixed line access services (whether or not the asset is also employed in the provision of other services).*

35 Second, the section provides for the value of a fibre asset to be calculated, in the case of pre-2011 assets, as the book value of those assets acquired by Chorus on demerger.

36 Subsection (3) was inserted by Supplementary Order Paper (**SOP**) to clarify what the Commission takes into account when calculating a fibre supplier's financial loss asset. It was not intended to change the understanding of what fibre assets could be incorporated into the initial value of the RAB. In particular, subsection (3) does not exclude recovery of financial losses from investments in pre-2011 assets. Rather, "*investments made by the provider under the UFB initiative*" includes pre-2011 and shared assets, as per the definition of a 'fibre asset'.

37 The proposed interpretation of section 177(3) would reward inefficient decisions to build new assets for UFB, when suitable existing assets were available to be reused – which cannot have been Parliament's intention.

38 It has also been suggested[14] that financial losses should exclude pre-2011 assets on the basis that the asset was "*not owned by Chorus before 1 December 2011*". This view would appear to make section 177(1)(a)(ii) meaningless. However the legislative requirement is to take into account the "*accumulated unrecovered returns on investment*" on those assets used to deploy UFB.

## *Inclusion of shared assets*

39 The initial RAB will exclude assets used for non-FFLAS and will only allocate a proportion of the shared assets to FFLAS.

40 Chorus disagrees with submissions asserting that the inclusion of assets shared with copper services will result in financial losses being overstated. RSPs incorrectly suggest copper prices already allow for cost recovery of shared assets with copper services and that these assets should therefore be excluded from the financial losses.

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[13] Trustpower (16 July 2019), *Trustpower submission: fibre regulation emerging views*, at [3.5.5]-[3.5.9].

[14] Vodafone (16 July 2019), *New regulatory framework for fibre: submission on fibre regulation emerging views*, p17 [footnote 12].

41 Copper prices were based upon the assumption that there was a hypothetical supplier operating a single network with 100% demand (i.e. prices were not just calculated on copper connections, but included Chorus fibre and other LFC's fibre connections). In reality, Chorus could only recover 100% of the shared cost if all consumers were (and remained) on the copper network. As consumers migrate to FFLAS, the proportion of shared costs that Chorus is able to recover under the copper prices is falling proportionately. Therefore an allocation of shared costs to FFLAS does not imply that Chorus will double recover costs. Instead Chorus should have the opportunity to recover costs related to providing FFLAS and be compensated for relevant financial losses in accordance with the legislation. Please refer to our submission for further discussion on this.[15]

### *The burden of proof does not sit with Chorus*

42 Some submitters have suggested that Chorus has a formal burden of proof to demonstrate the existence and magnitude of financial losses. There is no formal burden of proof. Rather, section 177 provides that it is for the Commission to determine the value of financial losses. In doing so, the Commission necessarily has to determine what a 'normal' return would have been for the period, against which Chorus' actual returns can be compared. The role of the BBM is to do just this, which is why it is an appropriate method to determine the value of Chorus' financial losses.

### *Financial loss calculation*

#### Losses were expected and a consequence of efficient pricing

43 The legislation anticipates financial losses incurred by LFCs' participation in the UFB initiative. There is nothing unexpected about the existence of financial losses for UFB, and such an outcome does not suggest that the UFB initiative has performed worse in a financial sense than expected. In fact, quite the opposite - virtually any new infrastructure project would have made a 'financial loss' as defined in the Act over the first decade of its operation, which investors would expect to recover subsequently as the asset matures. Section 177(2) simply ensures that Chorus is not prevented from reflecting this deferred cost-recovery in its regulated prices.

44 We are concerned that submissions continue to question how 'financial losses' is defined in the Act and may exist in relation to the UFB initiative, and suggest that this outcome is somehow irrational and/or unexpected. One submitter comments: [16]

> *The regulatory framework in place in 2011 – TSLRIC pricing model and UFB funding – was expected to leave Chorus fully funded through the period. The future regulatory framework had not been identified and, in this context, it is unclear where the losses might lie.*

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[15] See Chorus (16 July 2019), *Submission in response to the Commerce Commission's fibre regulation emerging views,* at [115-122].

[16] Spark (16 July 2019), *Fibre emerging views submission*, p1.

45 The cause of the loss is in fact because the regulatory value for the FFLAS assets are established by depreciating the assets – including all capital expenditure associated with the UFB initiative – according to the methods applied for accounting purposes, but with revaluations removed. For Chorus, this implies (principally) the straight-line method of depreciation and no inflation indexation.

46 However, in practice the accounting depreciation amounts will materially overstate the return of capital that is efficient (or even possible) for a new infrastructure project. Therefore, a new infrastructure project with prices designed to generate an NPV=0 and that best promote the efficient growth in the market would expect to have a residual value that exceeds the accounting value part way through the project's life. The difference between the residual value and the accounting value is what the Act refers to as the 'financial loss'.

47 This outcome is illustrated in the simple example below. The first three functions illustrate the residual value (i.e. unrecovered capital costs) that would result from setting a price path that is expected to deliver an NPV=0 for the project over its life, under the following assumptions:[17]

47.1 **Function 1** – Assumes a constant price (i.e. no CPI indexation) is applied and the full expected demand for the infrastructure arrives immediately on commissioning;

47.2 **Function 2** – Assumes a constant price (i.e. no CPI indexation) again is applied, but that consumers migrate to the new infrastructure evenly over a 5 year period;[18]

47.3 **Function 3** – Is the same as function 2, except that CPI indexation is applied to prices; and

47.4 **Function 4** – Shows the evolution of the accounting value of the project over its life.

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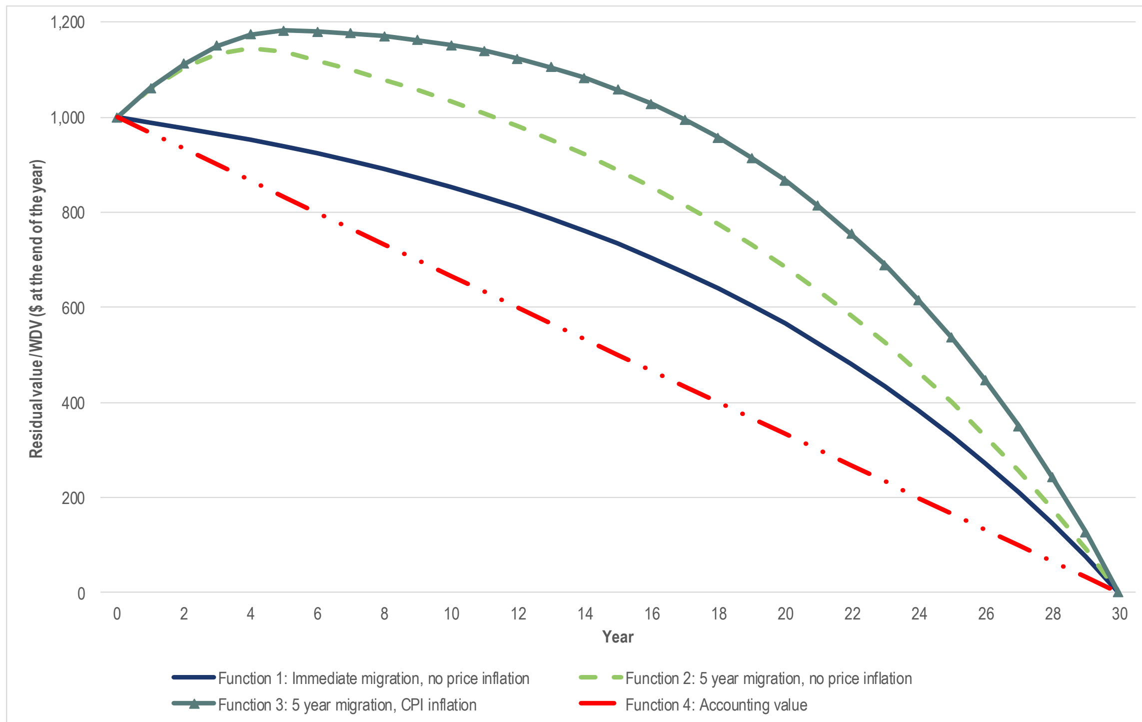
[17] This simple example also assumes: an asset cost of 1,000; zero operating expenses; pre-tax cost of capital = 7%; CPI inflation = 2%; a project life of 30 years; and a mid-year timing of revenue.

[18] More specifically, it is assumed that demand reaches 100% at the end of the 5th year, and that revenue reflects the average consumer numbers within each year (hence, revenue is assumed to reflect demand of 10%, 30%, 50%, 70% and 90% of the maximum in each of the first five years, and then to remain at 100% thereafter).

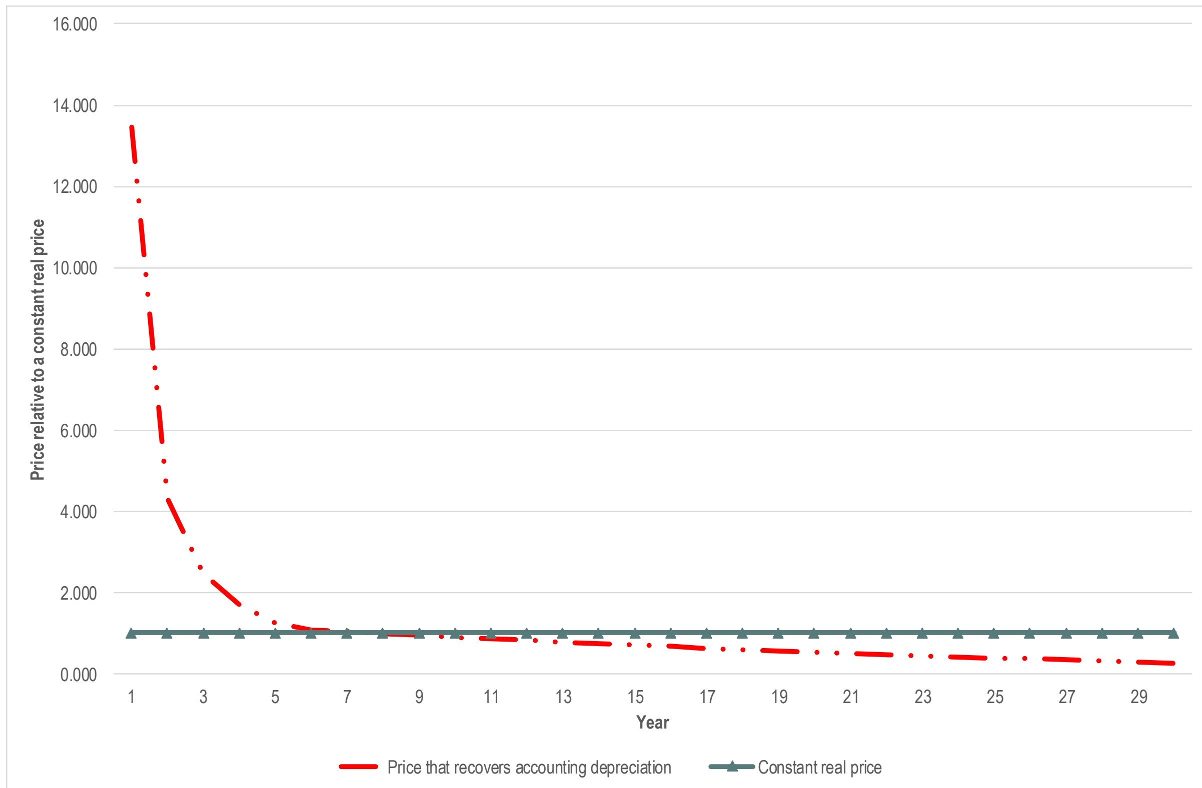
***Figure 1: Financial loss example***




48 The above example shows that there is a material difference between the residual value of the project and the accounting book value even if there was immediate migration to the project and no CPI escalation applied, and therefore a material financial loss as defined in the Act. The financial loss would also increase even further as consumers migrated (and/or demand grew) over a period and if the NPV=0 prices were determined on the assumption that they were expected to increase over time (e.g. through being indexed for CPI).

49 Figure 2 shows what the prices would have been required to recover the accounting depreciation, and therefore not generate a 'financial loss' as defined by the Act, for the stylised example presented above in Figure 1.

***Figure 2: Prices required to recover accounting depreciation***[19]




50 It is clear from the above figure[20] that extremely high prices would have been required to recover accounting depreciation in the early years of the asset's life. Prices this high would not promote efficient use of the asset.

51 While Chorus' situation is clearly more complex than embodied in this simple example, the causes of the divergence between the residual value and accounting value in the simple example are also present in the case of UFB. As such, there is every reason to expect that the accounting value would be substantially lower as at implementation than the residual value resulting from an efficient NPV=0 price path - and so every reason to expect that a financial loss as referred to in the Act would be found.

## Calculation of the loss asset must not involve expropriation

52 Some submitters[21] are advocating for the loss asset to be calculated on the basis of incremental or avoided cost. The effect of these proposals is that the regulatory value of Chorus' assets that were in place prior to 2011 and have or will be used to provide

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[19] Assumes a 5 year migration period.

[20] Assumptions apply and the situation of Chorus is more complex.

[21] Spark (16 July 2019), *Fibre emerging views submission*, at [53a]. Vodafone (16 July 2019), *Fibre emerging views submission*, p17-24.

FFLAS would be deemed to be zero, irrespective of whether Chorus has had an opportunity to recover those costs.

53 As discussed above, these proposals are inconsistent with the Act. The Act specifies how the FFLAS RAB is to be determined, and specifically provides for the treatment of pre-2011 assets. This valuation methodology flows into the financial losses calculation. Contrary to submitters' expectations, the Act does not afford the Commission a discretion to adopt a different approach to valuing assets for the purposes of the losses calculation.

54 The proposal would also enable a regulator to take advantage of the fact that investments cannot be reversed and so 'writes them off' in order to deliver an apparent gain to consumers, irrespective of whether such an outcome would be fair and principled. However, such an act would dampen the incentive for new sunk investments to be made, for fear this approach will be repeated, and ultimately act contrary to the long-term interests of consumers. It is for this reason the Act locked in the treatment of past (sunk) investments at a level that legislators considered to be fair.

### RROI for financial losses

55 We disagree with submissions[22] suggesting applying cost of capital on financial losses is likely to overcompensate Chorus for the costs it incurs. The requirement to devote investment funds to the UFB assets means that Chorus faced an opportunity cost, equal to the cost of capital. As the Commission says, a cost of capital is required to determine the benchmark allowable revenue using a BBM approach.

56 It has also been suggested the Commission should depart from its approach in Part 4, using a rate other than the cost of capital. This would be inconsistent with the real FCM principle. As recommended by Dr Lally,[23] the rate used for compounding the accumulated losses to the implementation date should be the same as the rate used to determine the benchmark allowable revenue.

57 We agree with Dr Lally's view. We also reiterate our previous view[24] that the relevant precedent is the Commission's approach to the wash-up mechanism in Part 4, where the cost of capital is used as the discount rate, or 'time value of money adjustment' when calculating the wash-up.

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[22] Vodafone (16 July 2019), *New regulatory framework for fibre: submission on fibre regulation emerging views*, p23. Link Economics (15 July 2019), *Report on the Commerce Commission's emerging views on fibre regulation*, p7.

[23] Dr Martin Lally (30 April 2019), *The cost of capital for fibre network losses*, p3.

[24] See Chorus (1 February 2019), *New regulatory framework for fibre: cross-submission on Commission's proposed approach*, at [75].

## Cost allocation

58 There is nothing new that requires fundamentally revisiting the Commission's approach to cost allocation. The cost allocation rules were designed to achieve outcomes consistent with workable competition, including preventing allocations that distort competition.

59 One submission[25] suggests the Commission consider a standalone cost cap for the allocation of shared costs. They advocate that this would require the Commission to test the total revenue cap against "*wholesale only providers (fibre and infrastructure*)".

60 A standalone cost test, in the context of a BBM regime, is only applied to test the amount of cost that is recovered from individual services and consumers, rather than overall. This is only one part of testing whether a particular price sits within the 'subsidy-free' bounds. The standalone cost test is never applied to create an alternative revenue cap based upon hypothetical costings.

61 In addition, if the Commission tries to impose some form of a standalone cost cap, it could potentially:

61.1 Preclude Chorus from significant groups of costs we are entitled to include (if they exceed the cap). To give effect to the Act's requirements, IMs should not preclude shared costs or significant groups of shared costs; and

61.2 Lead to assets being stranded if we are unable to recover the cost because the hypothetical cost cap was not high enough in reality.

62 Submitters[26] have also implied that Chorus has perverse incentives with respect to the allocation of costs between FFLAS and non-FFLAS and that these are more problematic than for those regulated under Part 4. Therefore they suggest a more prescriptive approach to cost allocation is required.

63 However, there is nothing different in Chorus' incentives relative to other suppliers that engage in both regulated and unregulated services (of which there are several airports that are the most obvious example), and therefore no reason to believe that the Commission's usual approach is insufficient.

64 In contrast to the submitters' concern, it is for the benefit of consumers if Chorus explores opportunities to use FFLAS assets to also provide unregulated activities, as

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[25] Spark (16 July 2019), *Fibre emerging views submission*, at [37]-[41].

[26] Spark (16 July 2019), *Fibre emerging views submission*, p4. 2Degrees (16 July 2019), *Fibre emerging views submission,* p12.

this will reduce the extent that costs are required to be recovered via FFLAS and therefore reduce FFLAS prices.[27]

65 We've previously said[28] that the Commission's proposal not to permit an optional variation accounting based allocation approach (**OVABAA**) puts Chorus at a disadvantage compared to firms in a competitive market when it comes to participation in a second market. In a competitive market, a firm will choose to undertake that second activity if it is able to recover anything more than the incremental cost of operating in that second market. The Commission's current proposal to require an accounting based allocation approach (**ABAA**) in all circumstances may render an efficient unregulated activity commercially unviable.

66 To the extent that changes in the market mean that we are able to make more use of fibre assets to provide unregulated services, we should have the incentive to do so. Additional revenues from unregulated services will lead to a reduction of the FFLAS cost base via the cost allocation process. That is, there is no need to make an explicit adjustment to the RAB to reflect the increased use of fibre assets for unregulated purposes – this occurs automatically via the process of cost attribution and allocation. While we raised in our submission the potential for unregulated activities that would be efficient for us to provide that are nonetheless uncommercial (where the allocation method results in more common cost being allocated to the unregulated activity than can be recovered through that activity), the appropriate means to remedy this is to provide more flexibility in cost allocation (i.e. to provide OVABAA as an option).

[27] Our comments on cost allocation incentives on competition relate to cost allocation post-implementation date.

[28] See Chorus (16 July 2019), *Submission in response to the Commerce Commission's fibre regulation emerging views,* at [103]-[106].

# PART 3: COST OF CAPITAL AND TYPE II ASYMMETRIC RISK

**Cost of capital**

- There is no reason for the Commission to depart from a service-wide approach to setting the mid-point estimate of the FFLAS cost of capital (before applying an uplift).
- We provided evidence in our submission on the increased risk of investing in fibre over copper, as well as the risks taken on by partnering with the Crown. There is a direct and strong relationship between the allowable cost of capital and Chorus' incentives for efficient investment, supporting the case for an uplift.

**Type II asymmetric risk**

- While RSPs support the real FCM principle, there are some inconsistent statements that the Commission doesn't have a role in keeping Chorus whole for the period of regulation. However consistency with real FCM needs to be achieved over the period from commissioning of the assets until deregulation (**overarching FCM objective**) to align with similar WCMs.

## Cost of capital

67 We agree with ENA[29] and support the adoption of the Part 4 methodology for determining the cost of capital, while recognising Part 6 has differences that need to be reflected in elements of the cost of capital for FFLAS.

### *Service-wide approach to the mid-point estimate*

68 We agree with the use of a service-wide approach to setting the mid-point estimate of the FFLAS cost of capital (before applying an uplift) and the simplified Brennan-Lally Capital Asset Pricing Model (**SBL-CAPM**).

69 Oxera[30] recommends the same comparator sample and subsequent sector-wide asset beta would adequately capture the total systematic risk exposure of both Chorus and other LFCs.

[29] Electricity Networks Association (16 July 2019), *Fibre IMs: emerging views – submission to the Commerce Commission*, [9]-[12].

[30] Oxera (15 July 2019), *Compensating for systematic risks*, section 3.

70 However, Enable and Ultrafast Fibre suggest other LFCs face greater demand risk exposure than Chorus. For example, WIK-Consult[31] submitted on behalf of Enable and Ultrafast Fibre:

> *The regional market environment provides a more direct insight into the competitive situation of the LFCs. We demonstrate that at the example of Enable. The Christchurch area, where Enable has built the fibre network, has the only major HFC network in NZ which has been upgraded by Vodafone to DOCIS 3.1 to provide ultrafast broadband.*

71 We disagree. MBIE's latest Quarterly Connectivity Update[32] shows fibre uptake in Christchurch (supplied by Enable) is currently 48%, while Wellington, Kapiti and Waikanae (supplied by Chorus) – all areas where Vodafone has HFC network – stands at 40.7%, 31.7% and 1.2% respectively. These latest statistics suggest the opposite to WIK-consult, and that Chorus' FFLAS is exposed to higher competitive threat from Vodafone HFC network relative to Enable's FFLAS.

## *Uplift for asymmetric consequences of under-investment*

72 We recommend the Commission selects a point above the mid-point estimate of the cost of capital range to recognise the material asymmetric consequences to under-investment in FFLAS. As Houston Kemp[33] concludes there is a strong case for a cost of capital uplift for FFLAS. There is a direct and strong relationship between the allowable cost of capital and Chorus' incentives for efficient investment. The negative consequences to consumers of under-estimating the true cost of capital for FFLAS are likely to comfortably exceed any negative consequences of over-estimating the cost of capital.

73 We've provided evidence[34] on the increased risk of investing in fibre over copper, as well as the risks taken on by partnering with the Crown. We've also provided evidence[35] on the potential for hidden under-investment, where the impacts of investment take time to become apparent and are unlikely to impact on performance metrics in the near term.

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[31] WIK-Consult (10 July 2019), *In response to the Commerce Commission's "Fibre regulation emerging views: Technical Paper of 21 May 2019*, [39].

[32] Ministry of Business, Innovation and Employment (March 2019), *Quarterly connectivity update March 2019*, p17 & p22.

[33] Houston Kemp (15 July 2019), *WACC Uplift – Asymmetric consequences of under-investment*.

[34] See Chorus (16 July 2019), *Submission in response to the Commerce Commission's fibre regulation emerging views,* at [43].

[35] See Chorus (16 July 2019), *Submission in response to the Commerce Commission's fibre regulation emerging views,* at [193-195].

74 In the absence of any direct measure, we recommend the Commission applies at least the 67th percentile, consistent with its approach for electricity distribution businesses (**EDBs**) and gas pipeline business (**GPBs**). There is no evidence to suggest the asymmetric consequences of under-investment in EDBs and GPBs are greater than the asymmetric consequences of under-investment in FFLAS. To the contrary, as the Commission's consultation on retail service quality[36] notes, a landline or broadband problem is more likely to have a severe impact on everyday life than problems with water or power utilities.

75 We support ENA's[37] response to the Commission's proposal for a percentile uplift:

75.1 The cost of capital percentile uplift for EDBs and GPBs reflects the asymmetric consequences of under-investment in energy networks for electricity and gas consumers. There may be similar considerations for FFLAS services as access to high quality, reliable data/telecommunications services has become increasingly important to businesses and households;

75.2 ENA is surprised the Commission would suggest they can use the threat of penalties to coerce investment, as a means for compensating for a cost of capital that Chorus considers too low; and

75.3 The use of a cost of capital percentile uplift has been an enduring feature of the regulatory landscape in New Zealand since at least 2003. To abandon the uplift may undermine the original business cases for UFB bids, and cause general loss of confidence in the regulatory environment.

## *Other cost of capital parameters*

76 The following table summarises the remaining cost of capital parameters:

| **Parameter** | **Comments** |
| --- | --- |
| *Asset beta* | While there is general agreement the Commission's approach to determining the asset beta is principled, a number of submissions support the view (including the other LFCs and investors) that the comparator sample proposed by CEPA, and the resulting recommended asset beta, does not accurately reflect the systematic risk associated with the provision of FFLAS.<br><br>Oxera's analysis[38] suggests a range of 0.46 to 0.57 estimated from the relevant comparator sample would be appropriate, with a mid-point estimate of 0.52. However, given that a proportion of the |

36 Commerce Commission (25 June 2019), *Monitoring phone and broadband retail service quality Consultation paper,* p3.

37 Electricity Networks Association (16 July 2019), *Fibre IMs: emerging views – submission to the Commerce Commission*, [13]-[20].

38 Oxera (15 July 2019), *Compensating for systematic risks*, section 5.

| | |
|---|---|
| | comparator companies consist of lower-risk businesses (i.e. copper), Oxera concludes that the asset beta for a standalone FFLAS is likely to lie above the 0.52 mid-point of the asset beta range estimated from the comparator sample. |
| *Tax adjusted market risk premium (**TAMRP**)* | We agree with Enable and Ultrafast Fibre[39] who support the Commission's proposal to update the TAMRP and specify a value in the cost of capital IM. |
| *Risk-free rate* | We agree with the Commission's proposal to set the risk-free rate in a similar way to Part 4.<br>This is consistent with the Commission's established approach, and stated rationale, to setting the risk-free rate. Maintaining a consistent regulatory approach, where appropriate, promotes greater certainty for suppliers, their customers and consumers. We are not aware of any differences that justify departure from the Commission's established approach. |
| *Credit rating* | Paradice Investment Management[40] submitted BBB+ is two full notches above the top average rating for both wholesale and integrated service providers.<br>Oxera[41] has recommended that a BBB credit rating would be appropriate for a standalone FFLAS provider. This credit rating is based on the average credit rating of the listed companies in the relevant comparator sample. |
| *Leverage* | Black Crane Capital[42] notes that CEPA's assumptions on leverage and long-term credit rating are inconsistent with each other.<br>Oxera[43] advised the average value of the leverage in the relevant comparator sample is 33%. However, Oxera has recommended that a notional gearing of 30% for a standalone FFLAS provider would be consistent with the comparator sample and the higher risk of fibre relative to copper. |

[39] Enable Networks Limited and Ultrafast Fibre Limited (16 July 2019), *Submission on NZCC fibre regulation emerging views: technical paper*, p18.

[40] Paradice Investment Management (10 July 2019), *Submission in response to the Commerce Commission's emerging views*, p2.

[41] Oxera (15 July 2019), *Compensating for systematic risks*, section 4B.

[42] Black Crane Capital (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p4.

[43] Oxera (15 July 2019), *Compensating for systematic risks*, section 5C.

## Type II asymmetric risk

77 In contrast to the views put forward by some other submitters, we believe the Commission is right to provide for compensation for Type II asymmetric risk because an investor would anticipate this risk ex-ante. We agree with the submitters who support regulatory tools being considered to compensate for our exposure to asymmetric risk.[44] As we put forward in our submission, the best tools to address the overarching FCM objective are to give Chorus more flexibility on pricing and depreciation. However this is likely to be only a partial solution if demand levels, anchor prices, and other regulatory constraints mean we are unable to recover our costs over the life of our investment.

78 We agree that Chorus has some scope to reduce recovery risk, and have advocated that the Commission maximise our ability to do this, for example, by providing more flexibility on pricing and depreciation. But we disagree with one submitter[45] suggesting we should be incentivised to do so through assets being removed from our RAB, i.e. through regulatory-imposed stranding.[46] The incentive to reduce the cost of providing FFLAS (subject to meeting our service requirements and expectations) naturally arises under the BBM with a revenue or price cap, and is enhanced by Chorus' recovery risk.

79 Specifically, we have a natural incentive in the regime to:

79.1 Optimise the timing of expenditure;

79.2 Reuse components to the extent that this is the lowest cost option; and

79.3 Sell unnecessary assets to the extent that this does not compromise our ability to meet our service obligations.

80 In relation to the last point, we note that our Optical Network Terminals (**ONT**) need to remain in place in the event of unbundling to support future wholesale layer 2 services that we are obligated to provide in the event that a consumer switches away from an unbundler. We also note that our ONT is a layer 2 device that is embedded in

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[44] WIK-Consult (10 July 2019), *In response to the Commerce Commission's "Fibre regulation emerging views: Technical Paper of 21 May 2019*, [52]-[67]. Electricity Networks Association (16 July 2019), *Fibre IMs: emerging views – submission to the Commerce Commission*, [7]-[8].

[45] Vodafone (16 July 2019), *New regulatory framework for fibre: submission on fibre regulation emerging views*, p7-8.

[46] One submitter also suggested that regulator-driven asset stranding would also be required and appropriate where the change in demand for FFLAS was offset, in part, by an increase in sales of unregulated services (such as backhaul). We observe that the cost allocation process would automatically adjust the FFLAS-RAB to reflect such a change in demand, and that there would be no need or logic for any further adjustment.

our layer 2 operating and business support systems. Selling or renting ONTs to unbunders would require complex and costly changes to those systems.[47]

### *Our proposal does not lead to over-compensation for Type II risks*

81 Appropriate compensation for the risks we face is necessary to maintain our incentives to invest. However we agree with other submitters that double compensation of risks should be avoided.

82 In its expert report submitted on behalf of Chorus, Oxera[48] states:

> *In addition to the higher level of systematic risk (reflected through an appropriately calculated asset beta), full fibre networks are exposed to a number of risks that are not reflected in the asset beta, which, if not properly accounted for in the regulatory framework, could sufficiently impede investment and / or result in a regulatory failure to allow investors the opportunity to earn a 'normal return'.*

83 For clarity, the below table summarises how our proposed approach to address Type II asymmetric risk fits together with our proposals for addressing other types of risk within the BBM framework to ensure coherency overall, avoiding double compensation.

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[47] Chorus (December 2018), *Chorus Consultation Paper on Passive Optical Network Fibre Access Service (PONFAS) product construct*, at [2.3].

[48] Oxera (15 July 2019), *Compensation for asymmetric type 2 risks*, at [1.6].

| Risk | Mitigation | Rationale for compensation |
|---|---|---|
| Systematic risk | Cost of capital | An investor requires a return to justify investment in a particular activity given alternative options (and adjusting for relative risk). This is the minimum necessary to attract investment. |
| Risk of mis-estimation of the cost of capital<br>*(Asymmetric consequences of under-investment)* | Cost of capital uplift | Recognition that the estimation of the cost of capital is imprecise, and consumers are likely to benefit (in terms of induced investment) from a degree of protection against the cost of capital being under-estimated. |
| Risk of catastrophic events<br>(*Type I asymmetric risk*) | Ex-post compensation | Either protection or compensation is necessary to achieve ex-ante FCM and so provide the incentives for investment. Protection (through ex-post compensation) avoids windfall gains and losses with little dampening effect on incentives. |
| Risk of under-recovery due to technological and market changes<br>*(Type II asymmetric risk)* | A combination of measures that may include:<br>• Flexibility in depreciation and pricing;[49]<br>• Accumulation of a fund (held in an escrow account) to provide ex-post compensation for RAB stranding;<br>• Possibility of retaining assets in RAB; and<br>• Cost of capital uplift (Type II asymmetric risk) for residual risk. | Either protection or compensation is necessary to achieve the overarching FCM objective when faced with the risk of under-recovery due to technology / market changes and provide investment incentives. The choice of measures in the IMs will enable the selection of the most appropriate and practical measures for a particular case. |

[49] The reference to "*flexibility in depreciation*" is intended to mean the flexibility to structure the recovery of cost over time to maximise the prospect of recovery. For Chorus, initially this is likely to imply a more back-ended depreciation method (i.e. to avoid unnecessarily high prices early in the life of the UFB that may slow migration and increase the exposure to competition from other networks), rather than the more accelerated depreciation the Commission has permitted for the EDBs (through shortened asset lives).

| Risk | Mitigation | Rationale for compensation |
|---|---|---|
| Forecasting risk – demand | Revenue cap with a symmetric wash-up and periodic price reviews. | The requirement for a revenue cap (and therefore protection during the RP) in the regime initially reflects the difficulty of forecasting revenue for a new and complex activity like FFLAS (a combination of (i) migration rate, (ii) consumers' product choices and (iii) the product price relativities), and reflects a desire to insulate **both** Chorus and consumers from windfall gains or losses from this forecasting risk.<br><br>New information is naturally incorporated into BBM prices for the next RP. |
| Forecasting risk – cost | Possibility of mechanisms to allow for additional capex in certain circumstances, and periodic price reviews | Chorus bears most cost risk within the RP (possible exception where there are reopeners to allow for events such as natural disasters and contingent projects). Actuals from the last period are naturally incorporated into BBM prices for the next regulatory period. |
| Inflation forecasting risk | Indexation of the revenue cap and RAB | A risk that consumers are better able to manage given that incomes typically move with CPI inflation, whereas inflation risk can be significant for long-term investors. |

# APPENDIX: SUMMARY POSITIONS – RESPONSE TO SUBMISSIONS

84 Other submissions to a large extent raise arguments we have already responded to in our submissions. Rather than repeat our responses, we provide the following summary of Chorus' positions on key issues, with a cross-reference to where our view is explained in detail.

## Legal framework

| Issue | Chorus position | Previous submission reference |
|---|---|---|
| *Purpose statement* | We agree with Enable's and Ultrafast Fibre's submission[50] that the purpose statement in section 162 has primacy over the objective in section 166(2)(b). | 21 December 2018 [81]-[97]; 1 February 2019 [38]-[47]; 16 July 2019 [56]-[63]. |
| *Interpretation of 'end-users'* | End-users of fibre fixed line access services (**FFLAS**) includes consumers of retail fixed fibre line broadband services and, in some cases, consumers of fixed wireless access (**FWA**) services where a FFLAS, such as direct fibre access service (**DFAS**), is an input into the FWA voice or broadband service.<br>This is consistent with submissions[51] from Spark and Trustpower. | 21 December 2018 [85]. |
| *Ultra-fast Broadband (**UFB**) GPS* | Given the UFB GPS is still in place, the Commission must have regard to it under section 19A of the Act. This is aligned with Enable's and Ultrafast Fibre's[52] submission. | 16 July 2019 [64]-[71]. |
| *Input Methodologies (**IMs**) for Subparts 7 to 10* | It is not relevant for IMs to cover matters in subparts 8 (enforcement), 9 (appeals) or 10 (orders and regulations).<br>While IMs could be made for subpart 7 matters (reviews), it's not necessary. | 16 July 2019, Appendix B p108-109. |

[50] Enable Networks Limited and Ultrafast Fibre Limited (16 July 2019), *Submission on NZCC fibre regulation emerging views: technical paper*, [2].

[51] Spark (16 July 2019), *Fibre emerging views submission*, p17. Trustpower (16 July 2019), *Trustpower submission: fibre regulation emerging views*, at [3.3.4].

[52] Enable Networks Limited and Ultrafast Fibre Limited (16 July 2019), *Submission on NZCC fibre regulation emerging views: technical paper*, [3].

| | Consistent with Enable's and Ultrafast Fibre's[53] submission on this point. | |
|---|---|---|
| *Scope of FFLAS* | The scope of FFLAS is the interconnection with a specified part of our fibre network (the relevant handover point) which provides a connection over fibre media to an end-user's premises, building or other access point. | 21 December 2018 [130]-[143]; 1 February 2019 [60]-[61]; 16 July 2019 [72]-[78]. |

## Economic principles

| Issue | Chorus position | Previous submission reference |
|---|---|---|
| *Key economic principles* | There is general agreement between retail service providers (**RSPs**) and the local fibre companies (**LFCs**) that the Commission should adopt the three key economic principles of real financial capital management (**FCM**), allocation of risk and the asymmetric consequences of over- and under-investment to guide the design of the IMs. | 21 December 2018 [103]-[127]; 16 July 2019 [79]-[96] |
| *Competition principle* | Other LFCs are aligned with our view that a competition principle is not required, as it would not add anything to the purpose set out in section 162. | 16 July 2019 [97]-[99]. |
| *Pricing principle* | We agree with Enable and Ultrafast Fibre[54] that a pricing principle is redundant in light of the other constraints on Chorus' pricing. In addition, it would be ineffective given Chorus' pricing structure will have to accommodate the effect of anchor services on the distribution of demand as well as other pricing constraints. | 21 December 2018 [128]; 1 February 2019 [22]-[27]; 16 July 2019 [97]-[99]. |
| *Starting price adjustment* | A starting price adjustment is irrelevant in this regulatory context where Chorus has a maximum allowable revenue (**MAR**) and anchor services specified. | 1 February 2019 [7.3]. |
| *Fibre unbundling* | Unbundling is to be set commercially for the first regulatory period (**RP**). An unbundling IM is not required, nor appropriate, for the layer 1 service. | 1 February 2019 [48]-[51]. |

[53] Enable Networks Limited and Ultrafast Fibre Limited (16 July 2019), *Submission on NZCC fibre regulation emerging views: technical paper*, p13.

[54] Enable Networks Limited and Ultrafast Fibre Limited (16 July 2019), *Submission on NZCC fibre regulation emerging views: technical paper*, p14.

## Transitional arrangements

| Issue | Chorus position | Previous submission reference |
|---|---|---|
| *Quality* | The IMs should allow for a transitional process in the RP1 for the setting of quality measures and standards. This is not unusual under the IMs framework for other industries. Transpower's transition to its first RP is a useful benchmark. Quality targets should not be linked to revenue and quality regulation, but should focus on targets rather than strict standards. | 21 December 2018 [225]-[227]; 16 July 2019 [106]-[110]. |
| *Expenditure* | A modified approach is appropriate for some expenditure process and evaluation requirements given the challenging timeframes to implement a new regulatory regime. Again there is precedent for this in the IMs framework for other industries. | 21 December 2018 [74]-[75]; 16 July 2019 [114]-[118]. |

## Asset valuation – excluding the financial loss asset

| Issue | Chorus position | Previous submission reference |
|---|---|---|
| *Valuing the initial regulated asset base (**RAB**)* | The other LFCs agree with us that a supplier-led process is appropriate for establishing the initial RAB. We expect there will be appropriate oversight from the Commission and a mechanism to balance the need for transparency with the need to protect highly commercially sensitive information.<br><br>It is essential Chorus has certainty on the initial RAB value prior to submitting a price-quality proposal as that information will inform our proposed operating and capital expenditure. | 21 December 2018 [61]-[66]; 16 July 2019, Appendix A [4]-[7]. |
| *Prescription of IM* | The Act prescribes the methodology for determining the initial RAB value.<br><br>A highly prescriptive approach to asset granularity is impractical.<br><br>As the other LFCs raised, IMs need to be flexible and durable to deal with the uncertainty about the future in such a dynamic market. | 21 December 2018 [159]; 16 July 2019, Appendix A [11]-[14]. |
| *Composition of RAB* | Regulated suppliers are best placed to determine which assets support the regulated services within the scope of FFLAS.<br><br>The definition of 'commissioning' should be consistent with accounting treatment, as is standard practice in Part 4. Chorus' audited | 16 July 2019, Appendix A [17]-[20]. |

| | | |
|---|---|---|
| | financial statements are prepared in accordance with GAAP principles and the New Zealand equivalent to IFRS. This means that assets should be eligible for inclusion in the RAB when that asset has been recognised in our accounts, and available to be provisioned. | |
| *Capital contributions* | Capital contributions should be recognised consistent with accounting standards – whether the contribution is netted off the value of the asset or treated as revenue as it is more practical to implement. | 16 July 2019, Appendix A [21]-[22]. |
| *RAB indexation* | It is appropriate to apply RAB indexation to FFLAS as a mechanism to manage inflation risk. This is important to ensure real FCM.<br><br>RAB indexation is also supported by other LFCs and Vocus.[55] | 16 July 2019, Appendix A [37]-[38]. |

## Asset valuation – financial loss asset

| Issue | Chorus position | Previous submission reference |
|---|---|---|
| *BBM approach* | The financial losses asset should be calculated using a BBM approach. This is consistent with requirements in the Act. | 21 December 2018 [169]-[171]; 1 February 2019 [72]-[79]; 16 July 2019, Appendix A [39]. |
| *Rate of return on investment (**RROI**) for financial losses* | A cost of capital is required to determine the benchmark allowable revenue using a BBM approach (against which the losses will be calculated). A time value of money adjustment (or discount rate) is required to inflate losses to a value at implementation date. Consistent with Part 4 precedent, cost of capital should be applied as the discount rate.<br><br>**Asset beta** – The asset beta used to estimate the cost of capital for the financial loss asset must reflect the particular circumstances of the pre-implementation period as the construction and early growth phase of the UFB initiative. Oxera concludes the asset beta in the pre-implementation period should be higher than the asset beta in the post-implementation period given the high demand risk, the high operational leverage and the longer-term cash flows in the | 21 December 2018 [63]; 1 February 2019 [74]-[76]; 16 July Appendix A [40]-[60]; Oxera (15 July 2019). |

[55] Vocus (16 July 2019), *Fibre regulation emerging views submission to Commerce Commission*, at [21.6].

| | | |
|---|---|---|
| | construction and early growth phase indicate a greater systematic risk.<br><br>L1 Capital[56] submitted that Chorus' operating risk, financial leverage and cost of equity during the build phase are significantly different to the RP1 and should be modelled separately.<br><br>**Risk-free rate** – The Commission should estimate the pre-implementation risk-free rate using the methodology it applies under Part 4. The term of the risk-free rate applicable to the calculation of financial losses should match the relevant period for which the fibre prices have been set – from December 2011 to the implementation date.<br><br>The Commission should also apply prevailing rates immediately prior to 1 December 2011. Again, this is consistent with the Commission's established approach, and stated rationale, to setting the risk-free rate.<br><br>If the Commission's underlying concern is the avoidance of windfall gains and losses in the pre-implementation period, then this would best be achieved by determining the cost of debt based on Chorus' actual cost of debt. The usual concerns that might arise about the use of actual cost of debt don't apply in the pre-implementation period. Ex-ante incentives to manage financing costs and investment decisions efficiently is not relevant as the costs associated with providing FFLAS have already been incurred.<br><br>Investors[57] have also submitted on this topic.<br><br>**Debt premium** – The trailing average approach to estimating debt premium is appropriate, but there are technical reasons why the approach would require adjustment for use in the pre-implementation period. | |
| *Crown financing* | Other LFCs agree with us that Crown financing is not costless. The legislation directs the Commission to take into account the actual financing cost of Crown Infrastructure Partners (**CIP**) instruments. This means the adjustment made to Chorus' required revenues for | 21 December 2018 [172]-[177]; 1 February 2019 [79]; 16 July 2019, Appendix A [61]-[70]. |

[56] L1 Capital (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p18.

[57] Investors Mutual Limited (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p3. TelstraSuper (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p1.

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| | concessionary financing should reflect the economic benefit to Chorus from the Crown financing.<br><br>Investors[58] also explain in their submissions why Crown financing is not costless. | |
| *Taxation* | LFCs also support:<br>• The tax asset base (**TAB**) should be calculated from 2011. The Commission should confirm post-implementation tax effects; and<br>• Tax losses should be carried forward until there is sufficient taxable income. | 16 July 2019, Appendix A [71]-[73]; Incenta (16 July 2019). |
| *Cost allocation* | As directed by the Act, LFCs agree the calculation of past financial losses must include both capital and operating costs, which includes those that are:<br>• Directly attributable to UFB; and<br>• A proportion of shared (pre-2011 and post-2011 assets).<br><br>This ensures that all costs are included, as the IMs cannot preclude costs or significant groups of shared costs. | 21 December 2018 [180]-[182]; 1 February 2019 [68]-[69]; 16 July 2019, Appendix A [74]-[90]. |
| *Accounting Based Allocation Approach (**ABAA**)* | Chorus and other LFCs are aligned with the Commission adopting a straightforward approach.<br><br>ABAA allows the alignment of the allocation of costs between FFLAS and non-FFLAS for the financial loss asset and forward-looking.<br><br>In line with ABAA, the allocation (and choice of allocator) should be made on the basis of causal allocators determined using the best information available. Where a causal allocator cannot be identified, or the information doesn't exist, then proxies should be used. | 16 July 2019, Appendix A [84]. |
| *Information asymmetry* | In response to submitters' concerns, and to provide interested parties with confidence, while protecting our confidentiality concerns, the Commission should use an independent third party, with a duty of care to Chorus and the Commission. | 16 July 2019, Appendix A [86]-[87]. |

[58] Black Crane Capital (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p5. L1 Capital (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, section (B). Investors Mutual Limited (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p2-3. Paradice Investment Management (10 July 2019), *Submission in response to the Commerce Commission's emerging views*, p2.

## Cost allocation

| Issue | Chorus position | Previous submission reference |
|---|---|---|
| *Level of prescription* | It is appropriate to adopt the Part 4 principled approach to allocating costs between FFLAS and non-FFLAS.<br><br>The other LFCs also agree the regulated supplier is best placed to identify appropriate allocators in the first instance. Cost allocation should be conducted using casual allocators. Where these are not available, proxies can be used. | 21 December 2018 [180-186]; [80-84]; 16 July 2019, Appendix A [100-101]. |
| *Allocation of costs between different types of FFLAS* | The other LFCs agree with us that it is unnecessary to require shared costs to be allocated between different types of FFLAS.<br><br>Any future situations that would require regulated suppliers to allocate costs between different types of FFLAS are purely arbitrary at this point. | 21 December 2018 [190]-[196]; 1 February 2019 [80]-[84]; 16 July 2019, Appendix A [107]-[110]. |
| *Optional Variation Accounting Based Allocation Approach (**OVABAA**)* | As with Part 4 businesses, section 162 provides the legal rationale for including OVABAA as it is about promoting the long term interests of FFLAS end-users.<br><br>Section 166(2)(b) also supports the inclusion of OVABAA where this would be needed for Chorus to use FFLAS assets to also provide unregulated services. | 16 July 2019, Appendix A [103]-[106]. |
| *Relationship with the Final Pricing Principle (**FPP**) model* | There is no double recovery of costs shared between copper and fibre. The Commission's task here is to implement a fibre regulatory regime. There is no double recovery because where assets are used for both copper and fibre services only an appropriate portion of shared costs will be allocated to the FFLAS. So any suggestion in other submissions that there is double recovery in terms of assets shared with copper regulated services is incorrect. | 21 December 2018 [3.2]-[3.3], [64]-[69]; 16 July 2019, Appendix A [115]-[122]. |
| *Part 4 definition of causal allocator* | It is a principled approach to include a requirement to apply the Part 4 definition of a causal relationship when allocating shared costs.<br><br>This is in line with adopting the Part 4 approach to cost allocation. | 16 July 2019, Appendix A [100]. |

## Cost of capital

| Issue | Comments | Previous submission reference |
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| *Starting point* | We support the overall conceptual framework the Commission proposes to adopt from Part 4 for determining the cost of capital. Within that methodology, the Commission needs to take into account differences between the respective regulatory regimes and regulated services and reflect these differences in elements of the FFLAS cost of capital. | 21 December 2018 [197]-[198]; 16 July 2019, Appendix A [123]-[128]. |
| *Service-wide approach to mid-point estimate* | We agree with the use of a service-wide approach to setting the mid-point estimate of the FFLAS cost of capital (before applying an uplift) and the simplified Brennan-Lally Capital Asset Pricing Model (**SBL-CAPM**).<br><br>Therefore, the same service-specific parameters, such as asset beta, leverage and credit rating, should be used for both Chorus and the other LFCs. | 16 July 2019, Appendix A [129]-[131]; Oxera (15 July 2019). |
| *Asset beta* | While there is general agreement the Commission's approach to determining the asset beta is principled, a number of submissions support the view (including the other LFCs and investors) that the comparator sample proposed by CEPA, and the resulting recommended asset beta, does not accurately reflect the systematic risk associated with the provision of FFLAS.<br><br>Oxera's analysis suggests a range of 0.46 to 0.57 estimated from the relevant comparator sample would be more appropriate, with a mid-point estimate of 0.52. However, given that a proportion of the comparator companies consist of lower-risk businesses (i.e. copper), Oxera concludes that the asset beta for a standalone FFLAS is likely to lie above the 0.52 mid-point of the asset beta range estimated from the comparator sample. | 16 July 2019, Appendix A [132]-[143]; Oxera (15 July 2019). |
| *Tax-Adjusted Market Risk Premium (**TAMRP**)* | The TAMRP should be updated, with a value specified in the cost of capital IM. As the Commission noted, if it adopted the current TAMRP from Part 4, by the time of the next review of the Part 4 IMs, that parameter would potentially be 12 years old.<br><br>The other LFCs support this approach. | 16 July 2019, Appendix A [144]-[146]. |
| *Risk-free rate* | It is appropriate for the Commission to set the risk-free rate in a similar way to Part 4. | 16 July 2019, Appendix A [147]-[148]; Houston Kemp (12 July 2019). |

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| | This is consistent with the Commission's established approach, and stated rationale, to setting the risk-free rate. Maintaining a consistent regulatory approach, where appropriate, promotes greater certainty for suppliers, their customers and consumers. There are no known differences to justify departure from the Commission's established approach. | |
| *Credit rating* | An appropriate credit rating for the FFLAS cost of capital is BBB. | 16 July 2019, Appendix A [149]-[157]; Oxera (15 July 2019). |
| *Leverage* | The average value of the leverage in Oxera's relevant comparator sample is 33%.<br>A notional gearing of 30% for a standalone regulated supplier of FFLAS would be consistent with the relevant comparator sample and the higher risk of fibre relative to copper. | 16 July 2019, Appendix A [149]-[157]; Oxera (15 July 2019). |
| *Debt premium & Term Credit Spread Differential (**TCSD**)* | The Commission should apply in the post-implementation period the same approach to estimating the debt premium and TCSD as it does for other regulated services, including those regulated under Part 4.<br>In determining the debt premium, the benchmarked credit rating should be sector-specific and not necessarily the same as in Part 4, given FFLAS' higher risk and demand uncertainty. Unlike the risk-free rate, the debt premium can vary by industry (i.e. to the extent that debt investors view those industries as involving different degrees of risk). This requires considering further the emphasis placed on observed debt premiums on bonds issued by qualifying issuers in different industries. | 16 July 2019, Appendix A [158]-[160]. |
| *Debt issuance costs* | There should be an allowance for debt issuance costs using the estimate determined during the 2016 Part 4 IM review, adjusted for the term used for the risk-free rate (i.e. the relevant RP). | 16 July 2019, Appendix A [161]. |

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| *Uplift for asymmetric consequences of under-investment* | A number of submissions (including investors[59]), comment on whether an uplift should be applied to the mid-point estimate of the cost of capital.<br><br>There is a strong case for a cost of capital uplift for FFLAS. There is a direct and strong relationship between allowable cost of capital and Chorus' incentives for efficient investment. The negative consequences to consumers of under-estimating the true cost of capital for FFLAS are likely to comfortably exceed any negative consequences of over-estimating the cost of capital. | 16 July 2019, Appendix A [164]-[206]; Houston Kemp (15 July 2019). |
| *Cost of capital uplift for Type I catastrophic risk* | Compensation for Type I catastrophic risk is best addressed by ex-post compensation mechanisms. Protection through ex-post compensation avoids windfall gains and losses with little dampening effect on incentives. | 16 July 2019, Appendix A [207]-[209]. |
| *Cost of capital for Information Disclosure (**ID**)* | The publication of an annual cost of capital for ID is not required and alternative options should be considered.<br><br>As Chorus will be subject to price-quality regulation (**PQR**), the Commission's proposals would imply the cost of capital used to set prices/revenues will also be used for ID. | 16 July 2019, Appendix A [211]-[213]. |

## Type II asymmetric risk

| Issue | Chorus position | Previous submission reference |
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| *Nature of risk* | Type II asymmetric risks comprise those risks to cost recovery associated with competitive entry, including technology stranding and deregulation. These risks differentiate FFLAS from other Part 4 regulated utilities, where the regulatory framework is premised on an expectation of enduring market power over successive regulatory periods.<br><br>The FFLAS regulatory framework is more complex than for Part 4 utilities and includes additional constraints that deprive Chorus of | 16 July 2019, Appendix A [215-217], [220]; Professor George Yarrow (16 July 2019). |

[59] Black Crane Capital (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p4. L1 Capital (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, section (D). Investors Mutual Limited (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p1. Schroder Investment Management (15 July 2019), *Submission in response to the Commerce Commission's emerging views*, p2. TelstraSuper (16 July 2019), *Submission in response to the Commerce Commission's emerging views*, p2. Ubique Asset Management (15 July 2019), *Submission in response to the Commerce Commission's emerging views paper*, p2.

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| | some of the tools that Chorus may otherwise use to mitigate these Type II asymmetric risks.<br><br>Anchor services, pricing and access rules, revenue caps and depreciation rules all could interfere with the discovery of information about the pricing and revenue profile that will best secure the return and on and of capital as Chorus moves to the point where demand for FFLAS supports increased capital recovery.<br><br>The Type II asymmetric risk Chorus faces encompasses the cumulative effect of past, present and future regulatory decisions as well as future technology and market developments. | |
| *Solutions to Type II asymmetric risks* | There is considerable uncertainty about the magnitude, probability and timing of all elements of this Type II asymmetric risk.<br><br>It's appropriate to consider the simplicity of an additional cost of capital uplift, but this solution has the risk of under- or over-compensation depending on the duration of the period of regulation. A short period of regulation coming off the back of regulated prices during the build phase could result in significant under-recovery. Whereas a prolonged period of regulation with a high uplift may have the opposite effect.<br><br>An escrow fund for asset stranding could be set up in the medium term. Whether this is a complete solution will depend on the degree to which it is able to provide sufficient funds at the time required.<br><br>A combination of measures should be applied, with these being measures carefully calibrated to ensure that there is no double counting. The measures proposed by the Commission are not mutually exclusive and, if designed carefully to maintain coherence, there would be benefits in addressing this risk through a range of mechanisms.<br><br>The most critical point is that the Commission, having rightly identified these Type II asymmetric risks, must address them in the IMs notwithstanding the complexity of the issues. And it is important that these risks are addressed up front to create efficient incentives that will underpin future investment. | 16 July 2019, Appendix A [221], [226], [229], [234]; Professor George Yarrow (16 July 2019). |
| *Estimating cost of capital uplift* | The EV Paper indicates a concern that a cost of a further capital uplift to address Type II asymmetric risk would be very difficult to estimate.<br><br>In response to this concern, the Commission can use a practical framework to estimate the magnitude of these risks and compensate fibre | 16 July 2019 [235-237], [240]; Oxera (15 July 2019). |

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| | investors for them – this is based on the 'fair bet' framework developed for Openreach and adopted by Ofcom when regulating the investment BT made in upgrading its copper network to FTTC in 2008.<br><br>Applying the framework to the UFB1 programme tranche of investment, Oxera[60] estimates an uplift above cost of capital would be needed to honour the 'fair bet' principle.<br><br>Oxera recommended the next steps the Commission should take are to comprehensively implement this framework in the regulatory regime for FFLAS. | |

## Quality

| Issue | Chorus position | Previous submission reference |
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| *Role of quality regulation* | The role of quality regulation is to incentivise regulated suppliers to provide fibre services of a quality that reflects consumer demands (i.e. it's not about mitigating the risk of uncertainty with highly prescribed requirements).<br><br>The regulation in the price-quality determination (**PQD**) must be considered in light of:<br>• The particular commercial context and market dynamics; and<br>• Other regulatory instruments in the wider fibre regulatory regime that will influence service quality. | 21 December 2018 [97]-[98]; 16 July 2019, Appendix A [243]-[261]. |
| *Level of prescription* | Certainty doesn't necessarily require a high level of prescription. The preferred approach is for Chorus to propose quality standards as part of the price-quality proposal in the same way Transpower does. | 21 December 2018 [213]-[221]; 6 July 2019, Appendix A [262]-[267]. |
| *Scope of quality dimensions* | There is no need for quality dimensions to be comprehensive and cover all aspects of quality.<br><br>The proposed dimensions are more than sufficient to encompass everything required to ensure the purpose of quality regulation is achieved. In fact, the dimensions noted, if applied to quality standards in the PQD, would | 21 December 2018 [207]-[212]; 21 December 2018 [95]-[98]; 16 July 2019, Appendix A [243]-[245], [285]-[294]. |

[60] Oxera (15 July 2019), *Compensation for asymmetric type 2 risks*, at [4.15].

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| | impose constraints beyond what's necessary to achieve the purpose. | |
| *Relationship to anchor services* | Trustpower[61] acknowledges the importance of anchor services to quality regulations. It is the role of the anchor service and DFAS regulations to baseline key non-price terms and service levels. It is important that the role of anchor services in quality regulation is not overlooked.<br><br>It is also important that the role of each instrument is clarified to avoid overlap and ensure a coherent overall approach. | 1 February 2018 [105]-[106]; 16 July 2019, Appendix A [253]-[261]. |
| *Consultation* | Consultation is important and allows stakeholders to have the opportunity to comment on quality requirements. The right time for consultation about desired network quality and the price-quality trade-off is during preparation of the price-quality proposal.<br><br>IMs should include consultation requirements on Chorus as part of developing price-quality proposals on an enduring basis. Given the prescription of quality for the RP1, consultation isn't necessary for the first price-quality proposal. | 21 December 2018 [222]-[224]; 21 December 2018 [102]; 16 July 2019, Appendix A [243], [270]-[272], [291]-[292], [311]-[317]. |

## Expenditure

| Issue | Chorus position | Previous submission reference |
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| *Forecasting accuracy* | A key challenge in the price-quality process will be arriving at forecasts that are as accurate as possible. The Commission recognises there are risks inherent in Chorus' capex forecasts, including uncertainty of consumer demand.<br><br>This is why it's appropriate that the IMs are designed with a menu of options for addressing different types of uncertainties. The Consumer Focus Group[62] suggests the rules should be able to accommodate changes in the market through innovation or unexpected demand changes.<br><br>Not having mechanisms of this type would risk a regulated supplier being given too much or too little allowance – leading to either windfall gains or projects that would otherwise been of value | 16 July 2019, Appendix A [304]-[306], [323]-[327], [328]-[331], [332]-[340], [348]-[351]. |

[61] Trustpower (16 July 2019), *Trustpower submission: fibre regulation emerging views*, at [3.2.8].

[62] Commerce Commission (18 July 2019), *Fibre regulation emerging views – consumer focus group session*, at [28].

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|  | not being pursued. However, adding too many mechanisms can detract from certainty for both regulated suppliers and consumers, as well as detracting from a regulated supplier's flexibility to reprioritise expenditure within a regulatory period. |  |
| *Consultation* | It's important for Chorus to engage with stakeholders to understand consumer demands during the development of our price-quality proposal.<br><br>The Consumer Focus Group[63] acknowledges there are differences between fibre suppliers and Part 4 so consultation methods, including how to reach the 'consumer voice', may look different. | 21 December 2019 [240]-[242]; 16 July 2019, Appendix A [311]-[317]. |
| *Independent verification (**IV**)* | There is general support for an IV requirement to be included in the capex IM on an enduring basis.<br><br>The IV process should be tailored to reflect the materiality of the price-quality proposal. | 21 December 2019 [240]-[242]; 16 July 2019, Appendix A [318]-321]. |
| *Capex approval* | The Part 4 framework for approving capex under the IPP, supplemented by some rules and processes used in the CPP regime, is a sensible starting point for consideration and approval of Chorus' price-quality proposals.<br><br>The Commission should apply the principle of proportionate scrutiny to price-quality proposals, as well as having mechanisms in IMs which allow applications for additional expenditure (e.g. to meet consumer demand). | 21 December 2019 [232]-[235]; 16 July 2019, Appendix A [332]-[340], [345]-[347]. |
| *Reopener mechanisms* | Reopener mechanisms should be available to address events that can't be managed by in-period substitution or anticipated in advance.<br><br>Any comparison of forecasts against actual expenditure is typically addressed – including in Part 4 – through incentive mechanisms and reset processes, not reopeners. | 21 December 2019 [230]; 16 July 2019, Appendix A [348]-[351]. |

[63] Commerce Commission (18 July 2019), *Fibre regulation emerging views – consumer focus group session*, at [25].

## Treatment of taxation

| Issue | Chorus position | Previous submission reference |
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| *Presenting tax as a building block* | LFCs support presenting tax as a building block. This is the most transparent approach to presenting tax costs. This method involves adopting transparent assumptions about tax-rated inputs and undertaking an explicit calculation.<br><br>We note that Link Economics[64] has misinterpreted the treatment of Crown financing in Chorus' annual reports. The Crown financing does not result in any tax deductions or assessable income for Chorus now or in the future. | 16 July 2019, Appendix A [354]; Incenta (16 July 2019). |
| *Tax payable approach* | This is where allowance for tax reflects the liability forecast for the next RP. This is preferable over the modified deferred tax balance approach. LFCs are aligned on this. | 16 July 2019, Appendix A [354]; Incenta (16 July 2019). |
| *Estimating debt costs* | Estimating debt costs using an assumed (notional) level of leverage is essential for remaining consistent with the Commission's logic for arriving at the leverage level assumed in the cost of capital estimate. The other LFCs agree. | 16 July 2019, Appendix A [354]; Incenta (16 July 2019). |

64 Link Economics (15 July 2019), *Report on the Commerce Commission's emerging views on fibre regulation*, p9.