Submission in response to the Commerce Commission's invitation to comment on its proposed approach to the new regulatory framework for fibre dated 9 November 2018

21 December 2018



We welcome this first step in the Commission's process.
The UFB programme is designed to establish a level playing field on which retail competition can flourish. This design avoids inefficient duplication of investment and is delivering world class services for New Zealand's homes and businesses.
There is a global trend toward structurally separated fibre-to-the-home (FTTH) open access wholesale networks. This model is delivering for New Zealand. We encourage the Commission to ensure that it does not act to undo the benefits of this model or encourage the growth of vertically integrated operators in retail markets.
An effective utility model will allow access to our network at fair prices, ensure consumers receive quality services while allowing a fair return on our investment.
We support the Commission's proposal to apply a building blocks model (BBM).
Early certainty on our initial regulated asset base (initial RAB) and our cost of capital are key drivers for our investors who want certainty after five years of policy review. We propose changes to the Commission's process to achieve this objective. We ask, in particular, that the Commission prioritise the initial RAB and provide a clear process and timing to achieve this.
We acknowledge the complexity of implementing a BBM. We encourage building on the precedents already in place from the Part 4 regulated sectors. We note that a lighter touch first regulatory period may be required, in line with precedents from other firms transitioning into BBMs.
We welcome the Commission's recognition that real financial capital maintenance (FCM) is the key principle underpinning the BBM. Investors must be afforded a reasonable expectation of a return on and of capital in a reasonable period to ensure continued investment.
We expect the Commission to recognise the higher levels of risk associated with Chorus' fibre investment than that associated with existing firms regulated under Part 4 of the Commerce Act and our copper network.
When making decisions on how to apply the Part 6 purpose statement we encourage the Commission to consider the rationale of the UFB model, which is to promote competition in retail markets, and avoid any actions that could reduce competition among Retail Service Providers (RSPs).
Implementing price-quality regulation (PQR) in a timely and effective manner will require ongoing working dialogue with the Commission to ensure it has the information required to set a price-quality path before 2022.

OVERVIEW

We welcome the Commerce Commission's consultation paper *New regulatory* framework for fibre – *Invitation to comment on our proposed approach* published on 9 November 2018 (**Issues Paper**) as an important step in the development of the post-2020 regulatory environment. The Issues Paper is the latest step in a process that began with the pre 2011 policy review and legislation, followed by MBIE's review of the Telecommunications Act 2001 from 2013 to 2017.

Policy Context

- New Zealand's Ultrafast Broadband (**UFB**) policy, establishing structural separation and FTTH roll out, is a major success.
- We and Local Fibre Companies (**LFCs**) are on track to build our networks, ahead of demand and under Crown oversight and market disciplines, to 87% of New Zealand. Our wholesale-only fibre infrastructure and services are provided on terms that ensure a level playing field for all RSPs.
- Wholesale access to our infrastructure is efficient from a "NZ Inc." perspective as it avoids unnecessary duplication and also promotes competition. There are now over 90 RSPs bringing choice to consumers.
- Consumers are getting improved broadband at affordable prices. The Commerce Commission's (**Commission**) 2017 Annual Market Monitoring Report finds that
 - A 'premium' 100Mbps fibre broadband service with unlimited data and a voice line can still be obtained for \$90 a month which is 5% below the OECD average and 24% below the equivalent Australian offering.¹
- The 2018 Annual Market Monitoring Report shows further progress with New Zealand moving from 5 percent to 9 percent below the OECD average for the 100 Mbps high user broadband and voice category.²
- Network operators and countries around the world now recognise that fibre networks provide the best future proofed technology to deliver gigabit capability and beyond. Wholesale fibre networks are springing up around Europe because traditional combined retail and network owners are finding the longer term economics of fibre network investment too challenging for their business models. EU policy makers are now promoting wholesale only networks as the solution to Europe's fibre shortage and encouraging fibre investment through pools of funding and recognition that fibre

https://comcom.govt.nz/ data/assets/pdf file/0016/111292/2018-Annual-Telecommunications-Monitoring-Report-18-December-2018.pdf p. 12.



https://comcom.govt.nz/ data/assets/pdf_file/0020/63821/2017-Annual-Telecommunications-Monitoring-Report-20-December-2017.PDF p.7.

- networks require higher rates of return than legacy networks.³ We're also seeing signs overseas of potential separation of mobile into wholesale open access for the same reason.
- In New Zealand's case equity investors and debt holders took on significant risk to enable these outcomes, and did so with the expectation that future regulation would respect that risk and enable a normal rate of return.⁴

Shift to utility style regulation for FFLAS

- 9 After many years of policy discussion, legislation has now been passed to implement utility style regulation for fibre fixed line access services (**FFLAS**) under Part 6 of the Telecommunications Act. In areas where fibre is available copper based services will be deregulated and TSLRIC based pricing for those services will no longer apply.
- This new regulatory framework is focused on services enabling access to, or interconnection with, the defined fibre network between a Point of Interconnect (**POI**) and a building or access point. Other services, such as backhaul, are not subject to Part 6 regulation.
- 11 This change in regulatory model was driven by a desire to ensure a regulatory framework was in place when Crown contracts governing UFB1 end on 31 December 2019.
- 12 A key objective of the policy process was that consumers receive fair quality/prices and investors receive a fair return and that, in the transition to the new regulatory model, shocks should be minimised.
- Another objective was to achieve a stable and predictable regulatory framework by building on the experience and precedents gained from utility regulation under Part 4 of the Commerce Act. It was acknowledged that there would be appropriate adjustments and flexibility in the regulatory framework to take account of key differences due to industry circumstances.
- A key reason for moving to the new regulatory model and to avoid shocks in this transition is to ensure that LFCs retain both the incentive and capacity to continue to undertake the investments that customers want. To this end, our ability to maintain an investment grade credit rating is critical for the on-going success of the UFB programme. We require an investment grade credit rating to service nearly \$2 billion of debt. This is a pre-requisite to receive UFB funding and is required to support

Government Policy Statement, Statement to the Commerce Commission Concerning Incentives for Businesses to Invest in Ultra-fast Broadband Infrastructure, 13 October 2011, available at https://gazette.govt.nz/notice/id/2011-go7120



Further information on the approach of EU policy makers is set out in paragraph [203.1] of this submission.

ongoing investment. It is important that this is not put at risk as we transition into the new regime.

Implementation of the Building Blocks Model

- 15 We agree with the Commission's view that a BBM is both appropriate and implicitly mandated by Parliament. We also agree that real FCM is the key principle that underpins a BBM. FCM is applied *ex ante*, meaning that investors can expect to recover the opportunity cost of their capital and the nominal value of their investment over time. Absent these expectations no investor would invest in the provision of infrastructure and services.
- The Commission has to undertake a number of one-off exercises specific to the establishment of this regime. In particular, the requirement to determine the value of losses incurred in providing UFB services between 2011 and 2022 means that the Commission has to undertake both backward and forward-looking assessments. Decisions about backward-looking cost allocation and cost of capital⁵ will likely differ from forward-looking approaches.
- Our circumstances differ from those of other regulated New Zealand utilities in a number of ways that are relevant to the implementation of the BBM. These include higher levels of systematic risk associated with fibre networks and greenfield deployments, the higher level of financial leverage associated with the UFB initiative, the higher risk of economic stranding and the exposure to a combination of price caps on anchor products, revenue cap and other regulatory instruments. Our particular circumstances also differ in material ways from the analysis adopted by the Commission in relation to the TSLRIC regulation of copper.
- 18 We agree the BBM approach, driven by principled Input Methodologies (**IMs**) that account for the specific factors related to fibre investment, should deliver predictable regulatory outcomes that support long term planning and investment.

Process to establish the BBM

- Significant ongoing regulatory uncertainty remains until the Commission sets the initial RAB and cost of capital and determines the revenue cap. This period of uncertainty has been lengthened by the extension to the implementation date from 1 January 2020 to 1 January 2022.
- The implementation of a BBM is a significant undertaking but there are already significant precedents that we encourage the Commission to build on to assist with the transition to the new regime. The UFB network has been built under the Network Infrastructure Project Agreement (NIPA) with Crown Infrastructure Partners (CIP). The NIPA was competitively tendered and heavily negotiated, and as a result reflects competitive market outcomes, including for example:

We refer in this submission to the backwards-looking cost of capital required in the UFB financial losses calculation as Rate of Return on Investment (**RROI**) (and "cost of capital" for the forwards-looking cost of capital).



- Key elements of service quality of the fibre network are secured through the agreed network design.
- Specified quality standards for a range of services. The wholesale services agreements (**WSA**) with RSPs have also been through industry consultation and are subject to ongoing CIP approval mechanisms.
- A powerful incentive to pursue efficiency as a result of Chorus' status as a publicly listed company delivering on what is essentially a fixed price contract.
- Given these circumstances we agree with the Commission's proposed approach to keep the IMs to the minimum required to implement the regime by 2022.
- We also agree with the Commission's indicated preference for a propose/approve model, whereby Chorus proposes forecast capital and operational expenditure to the Commission and the Commission scrutinises that proposal. We anticipate the IMs will also provide for other aspects of the proposal beyond capex, although we agree with the Commission it is not necessary for the IMs to specify all aspects of the price-quality path setting process.
- We suggest the Commission consider the following precedents and adjustments to its programme of work:
 - Precedent from Part 4 established lighter touch first regulatory periods to allow a timely transition into the BBM.
 - The determination of the initial RAB (including the value of the financial losses added to the RAB consistent with building and investing ahead of demand) should be prioritised and treated as a discrete exercise alongside the IMs development (with an early price-quality determination (**PQD**), if necessary, shortly after the completion of IMs).
 - The Commission should prioritise the cost of capital IM, recognising the need to consider Chorus' specific circumstances.
 - The information disclosure (**ID**) regime will require significant work. We suggest development of the ID regime is brought forward and run more in parallel with the PQD. The current ID regime, as pointed out on numerous occasions, is not fit for purpose, in particular given its approach to cost allocation. So there is now the opportunity to ensure the new ID regime appropriately supports the new regime. Final determination of the ID regime earlier better supports the implementation and transition that needs to follow.
 - Using reporting requirements in the first regulatory period (**RP1**) rather than strict quality compliance thresholds would also support a pragmatic and appropriate approach to implementation. In the meantime there are a number of regulatory mechanisms to ensure that consumer quality isn't adversely impacted.

 Other options to support efficient implementation include bringing forward or combining processes and emerging views papers, staggering IM topics and early indications of which elements of the Part 4 Commerce Act regime are relevant.

Key elements of the BBM framework

Purpose statement

- We encourage the Commission to consider that the primary reason for Chorus' existence as a structurally separated, wholesale only service provider is to encourage workable competition in retail markets for fixed-line broadband services. Accordingly, the Commission should not take any decisions that would prioritise competition in other markets over that objective, e.g. decisions that would reduce the ability of consumers to easily switch RSPs or disadvantage RSPs who do not own mobile networks.
- We note the Commission's statements that the objectives of sections 162⁶ and 166(2)(b) will usually be complementary and in practice the section 166 objectives will be met if they promote the section 162 outcomes. While we agree, if there is a conflict section 162 has primacy as the overarching purpose of Part 6 and the new regulatory framework. In contrast, section 166(2)(b) is only a mandatory consideration, where relevant.
- In considering whether it is relevant for the Commission to consider the promotion of competition, we strongly encourage the Commission to define clearly the relevant market(s) in which it is seeking to promote competition and why it considers that there is a real prospect of workable competition in those markets, and consider how different forms of competition in different markets will be affected by its decision.
- We do not see any conceptual inconsistency between the FCM principle and the expected impacts on Chorus of competitive substitution at the margins. The risk of competitive substitution is a risk investors would price into their investment decisions, and therefore a risk for which regulated suppliers should be compensated *ex ante*.
- The Commission states it's important that a regulatory regime designed to protect end-users does not end up being used to protect regulated suppliers from competition, or from the effects of competition. The Commission refers to section 176(2A), which is consistent with an orthodox application of the FCM principle. This principle doesn't mean we are not entitled to factor in the risk of competitive substitution when the price-quality path is set, or when we set our prices for the year ahead. The Commission has already, in other contexts, acknowledged it is appropriate for regulated suppliers to factor the risk of competitive substitution into the price-path.
- We also agree that risks should be efficiently allocated to suppliers or end-users depending on who is best placed to manage those risks. As the Commission notes, if

We note that we have used the section references in the Commission's Issues Paper, which reflects the third reading of the Act.

suppliers are not compensated for risks outside their control, this may have a detrimental impact on investment incentives in New Zealand.

Financial losses

- The legislation directs the Commission to carry out a financial losses calculation and, within it, to adjust for the actual costs of Crown financing.
- 31 The approach to valuing the financial losses asset is prescribed in the legislation, and we agree the Commission's proposal of applying a BBM approach is consistent with that direction. We think this means the unrecovered loss period 2011 to implementation should be treated as a single regulatory period, consistent with the UFB contract setting a forward-looking price path from 2011.
- Our preference for calculating the actual costs of Crown financing is a modified version of Method 1 set out in the Issues Paper. Consistent with the Commission's Method 1, the required return on assets for the relevant year would be reduced by the financing cost that Chorus had avoided through receipt of the concessional Crown financing. The Commission's proposed formula for Method 1 assumes implicitly that this avoided financing cost was equal to the RROI. We address this assumption further below.
- This approach more readily allows for the ongoing adjustment required by section 170(A) while allowing for the actual costs of Crown financing to be taken into account.
- We will demonstrate that Crown financing was not costless. In addition to transaction costs, Crown financing came with obligations on the phasing and specification of the roll out and penalties for failing to meet connection targets. Management step in remedies are also available to the Crown. Some of these obligations and risks are compensated by the UFB financial loss calculation (e.g. building ahead of demand), but others are not (e.g. step in rights, restrictions on Chorus' decisions to invest in and compete with copper services, and an *ex ante* risk of penalties). Furthermore, the structure of the Crown financing instruments needs to be taken into account when determining the saving in financing cost that we received as a consequence of the Crown funding.

Cost of capital

- We agree with the Commission's proposal to use the Part 4 approach as a starting point when determining the cost of capital IMs for FFLAS. However, FFLAS have some key characteristics which differ from Part 4 utilities and UCLL/UBA. These include the higher levels of systematic risk associated with fibre networks and greenfield deployments, the higher level of financial leverage associated with the UFB initiative, the higher risk of network assets stranding and the exposure to a combination of price-cap and revenue-cap regulation.
- These differences require that some elements of a FFLAS cost of capital methodology depart from the Part 4 and UCLL/UBA FPP approach, e.g. asset beta, leverage, debt premium and percentile estimate.
- We also agree with the Commission that the transition to the BBM and the different circumstances of the UFB network warrant revisiting whether there are asymmetric consequences of investment. This has traditionally been addressed by means of a

cost of capital uplift. In this case, we believe the BBM approach justifies an uplift and can be differentiated from copper pricing under the old regime.

Cost allocation

- Cost allocation arises in several components of the regulatory framework. The Commission needs to undertake separate but related backwards-looking cost allocation exercises to attribute fibre assets to the initial RAB, and to the UFB financial losses asset. Those exercises will differ slightly because the initial RAB relates to all assets that support FFLAS, whereas the financial losses asset is limited to assets that support UFB services. This latter allocation will have to address the build phase of the UFB initiative and potentially be limited by the availability of historical information relevant to allocation.
- Where possible, the Commission should undertake that allocation exercise based on causal allocators. Where appropriate causal allocators are not available, the Commission should adopt sensible proxies.
- 40 Chorus is in the best position to identify appropriate allocators in the first instance. We therefore propose to prepare an allocation of the initial RAB for the Commission's review, as the first step in that exercise.

Scope of the regulated services

- We agree with the Commission's proposed questions to assess whether an activity or service is a regulated service, its approach to the exclusion of copper services, and how services above layer 2 should be taken into account. We also agree that whether particular lines fall within the regulated service definition is likely to change as technology develops. The dynamic nature of how the service definition will apply to our network will need to be reflected in the IMs, particularly cost allocation.
- However, the Commission's suggestion that the regulated services may include any "services that support the operation of a network or its users" is overly-broad. We think that the text and purpose of Part 6 support an interpretation of the definition of FFLAS that is focussed on services enabling access to, or interconnection with, the defined fibre network between a POI and end-user's building or access point, and not beyond this.
- As such, services that are 'over and above', or additional to, the services required to support delivery of the regulated services are out of scope, as are backhaul services (including ICABS).

Implementing a price-quality path

- Finally, transitioning from the current regulatory framework to a price-quality path is going to be challenging for both the Commission and Chorus. The Commission is required to develop IMs while simultaneously progressing other aspects of the new legislation.
- 45 For our part, implementing a price-quality path entails significant change to our systems and practices and the development of new competencies. To take one example, the preparation of a five year forecast of operating expenditure (**opex**) and capital expenditure (**capex**), supported by a comprehensive asset management plan,

- is new for us. We are already well into the process of preparing for implementation of PQR but, like the electricity lines companies at the outset of Part 4, we are in the early stages of our 'journey'.
- It will be important that we and the Commission acknowledge the practical challenge that lies ahead and communicate effectively about what the Commission will need from us (and when). We also anticipate that, notwithstanding the Commission's desire to promulgate comprehensive and enduring IMs up front, transitional approaches will be necessary to ensure that a robust price-quality path is implemented on time.
- 47 We welcome early dialogue with the Commission on these issues.

Structure of our submission

- Our response to the Commission's paper broadly tracks the Commission's structure. We address:
 - The process for developing the IMs;
 - The relevant statutory context and purposes of Part 6;
 - Relevant economic concepts and principles;
 - Each of the Commission's identified issues for early discussion in **Appendix A**;
 - Our proposed alternative timetable in Appendix B; and
 - We respond to the Commission's specific questions in **Appendix C**.

PROCESS FOR DEVELOPING THE FIBRE INPUT METHODOLOGIES

The following matters should be progressed early to: (a) provide certainty to stakeholders, and (b) allow Chorus, and other LFCs for ID, sufficient time to prepare for implementation of the price-quality path: Initial RAB (including the value of the financial losses asset that also requires setting the Rate of Return on Investment (RROI)) - we ask the Commission to start work on this as a matter of priority and to clarify the process for Chorus to provide information to support the initial RAB calculations. We would appreciate the final decision on initial RAB by Q1 2020; Cost of capital – in this context we mean the cost of capital IM as we understand certain cost of capital parameters will only be set in a PQD closer to the start of RP1; The process for setting forecast opex and capex – as we will need early visibility and/or an agreed way forward with the Commission on some of the likely requirements to be in a position to meet them in our price-quality path proposal; and ID - our preference is for earlier development of the new ID regime (between the draft and final stage of IM development).

Introduction

- The Minister has agreed to defer the implementation date to 1 January 2022. The Commission has asked which IMs should be progressed more quickly to provide certainty to stakeholders.
- We think it's possible to progress IMs development on a shorter timeframe than the Commission contemplates, and that delivering earlier certainty would be valuable to all market participants. The value of the initial RAB is of particular importance to our investors and shareholders, as well as other stakeholders, followed closely by cost of capital, and therefore should be progressed as guickly as possible.
- Chorus supports the Commission clarifying the process and timing for calculating the initial RAB, including for any information requests.
- We support a propose/approve model for setting the price-quality path. However, given that we are new to a BBM approach, we face a significant challenge in preparing our price-quality path proposal for RP1. So we need an early indication of the Commission's PQR to progress our proposal. We also anticipate that the process for setting the price-quality path for RP1 may entail some transitional arrangements (which we discuss further below). Consideration of the need for transitional arrangements should begin immediately.

- Finally, the current ID regime is not fit for purpose in certain respects, generally related to the cost allocation approach, and we expect significant changes will be required. Complying with new ID requirements will also entail changes to our data capture and reporting systems. An early indication of the Commission's anticipated ID requirements would therefore be valuable so we can prepare for implementation.
- Our proposed alternative timetable is set out in **Appendix B**.

Streamlining development of the IMs

- A timely transition to the new regulatory framework is critical. Today there is considerable uncertainty about the implications for Chorus and other stakeholders of transitioning to a price-quality path for FFLAS. That uncertainty complicates our long-term planning and constitutes a risk for shareholders and investors, potentially undermining their confidence.
- Delivering certainty for shareholders and investors is important given the risks they were expected to assume as a consequence of participating in the UFB initiative (discussed in more detail in the Overview section above).
- Against that background, it's even more important the industry (including RSPs, us, our shareholders and our investors, and ultimately consumers) has as much certainty as possible, as early as possible, about the regulatory arrangements that will apply under the new framework.
- Early resolution of key components of the new framework will also deliver certainty to RSPs on their input costs and critical parameters of the regulated services. This will facilitate planning and investment in retail services by RSPs, which in turn is in consumers' interests. Conversely, delay in finalising the new regulatory arrangements will delay key planning and investment decisions, deferring the accrual of associated consumer benefits.
- Chorus supports the Commission's desire to ensure its regulatory decisions are of high quality. However, we don't think there necessarily needs to be a trade-off between robust and durable rules and prompt implementation of the regime. In contrast to the Commission's development of the Part 4 IMs in 2009 and 2010, there is now a substantial body of existing knowledge and experience about the issues involved in implementing a BBM approach using IMs. The Commission will be able to leverage its existing experience to more quickly isolate and focus on key issues.
- There are options available to streamline the development of the IMs that should allow the Commission to reach a final decision by Q2 2020:
 - 60.1 Bringing forward the emerging views paper, and/or combining it with the second process paper;
 - 60.2 Preparing and releasing emerging views and draft determinations in staggered tranches;
 - 60.3 Providing an early indication of those aspects of the Part 4 IMs that the Commission considers can and should be quickly adapted to the telecommunications context with minimal changes.

Initial RAB and cost of capital

- As the Commission will appreciate, the initial RAB and cost of capital are the 61 parameters that most significantly affect the value of the business. Uncertainty regarding the value of the initial RAB and cost of capital is an issue of substantial concern for shareholders and investors, which in turn affects Chorus' ability to plan and invest in its network.
- 62 Bringing forward decisions on the initial RAB and cost of capital would deliver certainty to Chorus and our investors. Conversely, there does not appear to be any significant downside in accelerating the development of these parameters.
- 63 Determining the value of the initial RAB and the cost of capital requires that the Commission address a number of related issues:

Issue	Comment			
Initial value of fibre assets:				
Valuation	Section 176(1) sets out the methodology for valuing pre- and post-2011 assets.			
Depreciation	Straight-line depreciation is required by section 176(1).			
Backward-looking cost allocation	The Commission will have to undertake a cost allocation exercise to determine the initial value of the fibre RAB.			
	This is a separate exercise to the determination of the forward-looking cost allocation IM, which will set out the principles to guide cost allocation for expenditure incurred and assets commissioned after the implementation date.			
UFB financial losses asset:				
Unrecovered returns	We support the Commission's proposal to use a building blocks approach to determine accumulated unrecovered returns.			
Crown financing	The Commission has outlined two approaches to take account of the value of Crown financing in the valuation of the financial losses asset. We prefer a modified version of the Commission's proposed Method 1.			
RROI for financial losses	The Commission will have to determine an appropriate RROI for the period 2011 to implementation to determine the UFB financial losses in that period.			
	We view this as a separate exercise to the determination of the cost of capital for RP1, although we expect an orthodox cost of capital methodology will be appropriate to both. At a minimum, the Commission's usual approach will require modification to determine a			

	backward-looking RROI across a longer than usual regulatory period.
Cost of capital for RP1	
Forward-looking cost of capital	In addition to the cost of capital for valuing the UFB financial losses asset, the Commission has to determine the forward-looking cost of capital for RP1. These are discrete exercises.
	We broadly support the Commission's proposal to draw on its FPP and Part 4 experience, with the caveat that the particular circumstances of FFLAS and Chorus must be reflected in the Commission's cost of capital methodology.

- 64 The Commission has not indicated in its Issues Paper the extent to which the methodology for determining the initial RAB (including the UFB financial losses asset) will be set out in IMs. Given that this is a one-off exercise, we do not think an extensive IM is necessarily required. For the most part the value of the initial RAB could be addressed directly in an IM for this discrete exercise (and a section 170 determination if necessary). Our priority is for that work to commence as quickly as possible so that Chorus and its investors and shareholders have early certainty as to the value of the initial RAB.
- 65 The following points support accelerating the initial RAB and cost of capital parameters:
 - 65.1 Unlike Part 4, the basis for setting the initial RAB is set down in the Act. There is nothing standing in the way of commencing that work now;
 - 65.2 The IMs required to support the setting of the initial RAB (including the UFB financial losses asset), and the initial RAB value could be drawn together into an initial RAB IM;
 - 65.3 The initial RAB and cost of capital IM are discrete parameters and therefore can be addressed separately from, and prior to, section 170 determinations for PQR;
 - 65.4 Section 170(4) also provides that the Commission may address regulation of FFLAS through one or more determinations. So it is open to the Commission to use this mechanism to issue early section 170 determinations providing for the value of the initial RAB (if the Commission considers a determination is required);
 - 65.5 The Commission can update the RAB for the period from setting of the initial value to the date of the PQD of Maximum Allowable Revenue (MAR), when it considers the price-quality proposal and sets the MAR;
 - 65.6 There is precedent for streamlining certain IMs. By streamlining we mean moving faster on some aspects of the IMs workstreams and potentially PQD for early visibility. In the course of the 2016 IMs Review the Commission fasttracked certain IMs in order to facilitate suppliers' pricing determinations;





- 65.7 Similarly, there is nothing standing in the way of commencing work on the cost of capital IM now.⁷ We support the Commission's proposal to rely on its prior experience determining cost of capital in the context of the copper FPP and Part 4 determinations. However, there are aspects of the Commission's standard cost of capital methodology that need to be reconsidered. We anticipate this to be a narrow and focused exercise, drawing on the Commission's existing methodology.
- We are aware section 222 regulations need to be set, but we don't think this should impede the Commission starting the process to set the initial RAB.

Requirements for the price-quality proposal

- 67 Section 175 obliges the Commission to develop a capex IM. We agree with the Commission's indicated preference for a propose/approve model, whereby we propose forecast capex and opex to the Commission and the Commission scrutinises that proposal. We anticipate the IMs will also provide for other aspects of the proposal beyond capex, although we agree with the Commission it is not necessary for the IMs to specify all potential aspects of the price-quality path setting process.
- The Commission's proposed timetable suggests we will have to submit a price-quality path proposal mid-2020. However, the draft capex IM and IM for rules and processes will only be published at the end of 2019. That does not leave sufficient time for us to develop an IMs-compliant price-quality path proposal by mid-2020.
- The challenge is compounded by the fact this will be the first time Chorus will have had to develop a price-quality path proposal. It's likely that unanticipated issues will arise while developing that proposal.
- 70 That suggests it would be useful, to meet the Commission's proposed timetable, to:
 - 70.1 Immediately begin a discussion on the anticipated requirements for a pricequality path proposal so we can progress it in parallel with the IMs process (e.g. use of an independent verifier); and
 - 70.2 Ensure the IMs incorporate sufficient flexibility to accommodate unforeseen challenges in preparing and scrutinising the price-quality path proposal.
- 71 Ideally, the Commission would publish a draft capex IM and rules and processes IM with details regarding the Commission's proposed approach to expenditure by June 2019. This would allow us sufficient time to incorporate the Commission's proposed approach into the development of our price-quality path proposal.

As noted above, we understand that some of the cost of capital parameters may be set in a PQD closer to the implementation period. However, earlier visibility of the Commission's cost of capital approach is important to stakeholders

- In addition, the IMs applying to the preparation of the price-quality path proposal and the Commission's process for setting the PQD should incorporate sufficient flexibility to accommodate:
 - 72.1 The prospect of unforeseen challenges arising after the IMs are determined; and
 - 72.2 The short timeframe available to determine the price-quality path for RP1.
- 73 The constrained timetable and the fact that we need time to prepare for the BBM approach mean there is a reasonable prospect we will have to agree an approach to setting expenditure for RP1 that differs from the approach that the Commission will adopt in the IMs.
- It's appropriate the Commission determines enduring IMs that will provide regulatory certainty over several regulatory control periods. But that should not prevent the Commission and Chorus from agreeing practical solutions for RP1 to ensure that the price-quality path can be implemented in good time. We think that will require the adoption of transitional measures diverging from the Commission's expected future approach.
- 75 A transitional approach to setting expenditure for RP1 might include, e.g.:
 - 75.1 Less granular or prescriptive information requirements for the price-quality path;
 - 75.2 Striking a balance between requiring information up front in the price-quality path proposal versus seeking that information subsequently and only if necessary through information requests;
 - 75.3 An appropriate, and proportionate, level of scrutiny to be applied to proposed expenditure;
 - 75.4 Other optional mechanisms we could elect to use, for example, resetting forecasting annually; and
 - 75.5 Deferring the implementation of any consultation requirements to RP2.

Information disclosure

Our preference is for the Commission to start developing the new ID regime earlier (between the draft and final stage of IM development) to allow sufficient time to develop and implement an ID regime that is fit for purpose. Starting earlier would allow ID to be developed, alongside PQDs, which in our view is most effective (given the relationship between IMs, PQR and ID regulation). If the ID regime was finally determined by Q2 2021 that would allow us and other LFCs sufficient time to develop internal systems and processes for implementing the new ID regime – otherwise the transition would be unnecessarily challenging.

THE RELEVANT STATUTORY CONTEXT AND PURPOSES OF PART 6

We support the Commission's view of the regulatory framework that it will need to apply when determining the IMs for FFLAS suppliers. In particular, we support:
The Commission's interpretation of "end-users of telecommunications services";
The general approach to interpreting sections 162 and 166(2)(b);
The Commission's preliminary view on how section 173 applies when the Commission sets the IMs; and
The Commission's preliminary view that a BBM approach similar to that adopted under Part 4 would best give, or be likely to best give, effect to the objectives in section 166.
Our view differs from the Commission's on the relationship between sections 162 and 166(2)(b). As the purpose of Part 6, section 162 plays a greater role in the Commission's decision-making. However, we agree with the Commission that, in practice, sections 162 and 166(2)(b) are likely to be complementary objectives, rather than in tension.

Relevance of Part 4 of the Commerce Act to Part 6

- We agree with the Commission that Parliament made a deliberate decision to base the regulatory model in Part 6 on the existing model in Part 4 of the Commerce Act 1986. This means that:
 - 77.1 The interpretation of key provisions in Part 6 that are the same as in Part 4 can draw on the courts' and the Commission's prior thinking about Part 4; and
 - 77.2 The Commission can draw, as appropriate, on its experience of Part 4 regulation in some cases this may permit a "lift and shift" of IMs and PQD elements.
- At the same time, we agree there are important differences both between the two regulatory regimes and the markets being regulated. This means Part 4 positions will not always be appropriate to adopt under Part 6.
- We also agree the Commission must make the judgements required under Part 6 independently by reference to the statutory provisions and purpose statements of Part 6, and cannot simply import approaches under Part 4 without testing whether they are fit for purpose.
- In addition to the differences noted in the Issues Paper, the following context will be relevant to how the Commission applies Part 6 to FFLAS:
 - 80.1 A single network: We have a single network providing both regulated and unregulated services with dynamic asset utilisation. The BBM only applies to







- fibre. So there will be a steady growth of assets attributed to the BBM as we transition away from legacy copper technology. Together, these factors and rate of change, make the telecommunications industry and FFLAS far more dynamic than other Part 4 regulated industries.
- 80.2 With differentiated regulated services: We offer, and the regime continues, differentiated FFLAS services to meet a range of consumer demands. The ability to differentiate the core service delivered to customers, and to tailor different products based on customer and consumer demand, is much higher than in other regulated industries such as electricity and gas. In technical terms there is also a much higher level of optionality (i.e. the ability to mix and match "products") to deliver the outcome sought by consumers.
- 80.3 Constructed ahead of demand and early stage of maturity: Our network is constructed ahead of demand, and we are currently in a 'build' phase. Our contractual requirements are to deliver a network as an enabler for the economy. The requirements reflect a Government choice to invest to build capacity on an accelerated schedule, ahead of when the normal commercial and purely economic build would have been undertaken. The maturity of our network differs from those regulated under Part 4 which are well established.
- 80.4 The transitional challenge is significant: Chorus' systems and asset management framework are set up for the existing regulatory framework. So there is a significant operational challenge in moving to a BBM. This is a significant transition for Chorus and presents a risk to the business and therefore the long-term interests of consumers. For example, electricity distribution businesses (EDBs) were previously regulated under the thresholds regime, and also had a relatively steady state network and demand. This is very different from us. We have a new network, transitioning from a build to maintain and operate phase, and we're moving to a very different framework from TSLRIC. Where TSRLIC is focussed on services, BBM is much more focussed on assets.
- 80.5 The regulatory environment is more complex: We are faced with other constraints (which companies regulated under Part 4 are not) such as non-discrimination, mandatory products, equivalence of inputs (**EOI**), geographically consistent pricing, and unbundling, that all need to interact. In addition, we have constraints on us that other market participants we compete with do not.

Purpose statements

- In interpreting and applying Part 6, the Commission must have regard to the purpose of the Part set out in section 162, and the statement of objectives in section 166.
- The Commission and courts have previously recognised that not all decisions will require express consideration of the purpose and objectives. For example, in the case of the initial RAB value, Parliament has prescribed a particular methodology for the Commission to adopt. In the case of similar legislative provisions in Part 2 of the Act, the Court of Appeal concluded that there is no need to consider the application of the

- purpose statement separately, because Parliament can be expected to have legislated consistently with the purpose of the part.⁸
- Similarly, in certain situations where the Commission is engaged in an 'evidence-based task', there may be no requirement or need for the Commission to consider the purpose statement. We think the same reasoning would also apply to the section 166 statement of objectives in these cases.

Section 162

- We agree with the Commission's approach to the interpretation of section 162. Section 162 is closely based on section 52A of the Commerce Act, which was considered in detail by the High Court in the IM merits appeal.¹⁰ The Issues Paper contains a fair summary of the key points from the High Court's judgment.
- We also agree with the Commission's approach to the interpretation of "end-user". In particular:
 - 85.1 The use of "end-user" is a deliberate change from section 52A. It requires the Commission to focus on the long-term benefit of the ultimate recipient of the service or another service whose provision is dependent on the service, rather than intermediate acquirers like RSPs; and
 - 85.2 The second part of the definition of an end-user is most relevant given the restrictions on retail supply of telecommunications services by Chorus and other LFCs. The end-users of FFLAS will include consumers of retail fibre fixed line broadband services and, in some cases, consumers of Fixed Wireless Access (**FWA**) services where a FFLAS, such as Direct Fibre Access Services (**DFAS**), is an input into the FWA voice or broadband service. The interests to be promoted are those of the end-users as users of FFLAS, not the broader interests of those users as participants in New Zealand's wider economy.¹¹

Section 166

- We agree with the Commission that the section 166 direction is a mandatory relevant consideration when making IM determinations, ID regulation and PQR. As the Commission records, section 166 contains two objectives:
 - 86.1 The purpose of section 162 (section 166(2)(a)); and

⁸ Chorus v Commerce Commission [2014] NZCA 440 at [153].

⁹ Chorus v Commerce Commission [2014] NZCA 440 at [155].

Wellington International Airport Ltd v Commerce Commission [2013] NZHC 3289.

Powerco v Commerce Commission [2008] NZCA 289 at [23]; Wellington International Airport Ltd v Commerce Commission [2013] NZHC 3289at [222].

- 86.2 To the extent that the Commission considers it relevant, the promotion of workable competition in telecommunications markets for the long-term benefit of end-users of telecommunications services (section 166(2)(b)).
- Just as the section 162 purpose statement deliberately mirrors section 52A of the Commerce Act, section 166(2)(b) deliberately mirrors section 18 of the Act and section 1A of the Commerce Act. As with section 162, the courts and Commission's previous thinking on the interpretation and application of section 18 and section 1A will be relevant to how section 166(2)(b) is interpreted and applied.¹²
- The section 166(2)(b) objective is a mandatory relevant consideration only where the Commission considers it to be "relevant". In assessing when the objective is relevant, the Commission is entitled to have regard to the Part 6 purpose, and the legislative history of section 166(2)(b).
- 89 Section 166(2)(b) was inserted into the Amendment Act at the Select Committee stage. The Economic Development, Science and Innovation Committee's report explained it had amended section 166 to "give the Commission the necessary flexibility to respond to technological change". The amendment was necessary, the Committee believed, because section 162 required the Commission to consider the long-term benefit of end-users in markets for FFLAS. Section 166 was intended to "permit the Commission to consider all end-users' interests, not just the interests of fibre users".
- Consistent with that legislative history, and with the purpose of Part 6, it will arguably be relevant to consider the section 166(2)(b) objective where:
 - 90.1 There is a telecommunications market or markets in which competition is present or likely to emerge; and
 - 90.2 The determination to be made by the Commission may affect competition or the likely emergence of competition in that telecommunications market.
- In assessing the state or potential state of competition, the Commission should base its assessment on evidence, rather than making or relying on assumptions or speculation.
- The retail market for telecommunication services is the most obvious and important market for the Commission to consider. Competition in that market is already present, and is the primary arena of competition to drive long-term benefits for endusers, reflecting the strategic policy choices made by the Government to introduce a structurally separated, wholesale only provider of copper and fibre network services. Part 6, together with the provisions of Part 4AA, supports this choice by promoting retail competition through a regulated open-access fibre network across which large and small RSPs can compete on equal terms. Accordingly, in considering section

¹³ Telecommunications (New Regulatory Framework) Amendment Bill (293-2) (explanatory note) at 4.







Fletcher Inquiry Report, at page 42. See also the discussion of s 18 of the Act in *Chorus v Commerce Commission* [2014] NZCA 440 at [151].

- 166(2)(b), the Commission should give significant weight to the benefits of retail competition for the long-term benefit of end-users of all telecommunications services.
- 93 Where section 166(2)(b) is relevant, the Commission must make the decision that best gives effect to both limbs of section 166. We agree with the Commission that the objectives will be complementary rather than competing. In practice the section 166 objectives will be met if they promote the section 162 outcomes. Most obviously, promoting outcomes consistent with section 162 for FFLAS will promote effective retail competition for the long-term benefit of end-users.
- However, if a balance between the objectives is required, the section 162 purpose statement should be given primacy:
 - 94.1 Section 162 sets out the purpose of Part 6, so is a necessary aid to interpreting all of the provisions within that Part, including section 166 and section 166(2)(b); and
 - 94.2 If section 166(2)(b) permitted the Minister or Commission to make a decision that did not best promote the long-term benefit of end-users in markets for FFLAS by promoting outcomes consistent with workably competitive markets, e.g. by promoting an outcome that was inconsistent with a workably competitive market, this would itself be inconsistent with the section 162 purpose statement.
- 95 Finally, section 166(2) is framed conjunctively, not disjunctively. So if the Commission considers the promotion of competition to be relevant, the Minister or Commission must best give, or be likely to best give effect to both the purpose in section 162 and promotion of competition. It's not for the Commission to choose between these objectives. There's no objective criterion to enable that assessment either, other than the Part 6 purpose statement. So the Minister and the Commission must make decisions that best give effect to the promotion of outcomes consistent with those in workably competitive markets.

Section 173

- We agree with the Commission's approach to section 173. Under Part 4, the Supreme Court and High Court have confirmed the importance of IMs, and the Part more generally, is to promote certainty. Consistent with this, a key purpose of Part 6 was to establish a stable and predictable regulatory framework for telecommunications service providers.
- 97 We acknowledge this does not mean absolute certainty. Regulatory certainty is "conceptually subordinate" to the central purpose in section 162 of the long-term

¹⁶ Wellington International Airport Ltd & Ors v Commerce Commission [2013] NZHC 3289, at [214].







Vector v Commerce Commission [2012] NZSC 99, [2013] 2 NZLR 445 at [56] – [61]; Wellington International Airport Ltd & Ors v Commerce Commission [2013] NZHC 3289, at [213].

See the explanatory note to the Telecommunications (New Regulatory Framework) Amendment Bill as introduced on 8 August 2017.

benefit of end-users, but "a materially more certain input methodology is to be preferred to a less certain input methodology".

Building Block Model approach

- 98 We agree the Commission should adopt a BBM approach under Part 6. As the Commission correctly notes, the legislation, together with the key legislative history including the Minister's review under section 157AA makes it clear Parliament intended a BBM approach would be adopted.
- In addition, certain provisions in Part 6 only make sense in the context of a legislative expectation that a BBM approach would be adopted. In particular, the prescription of the methodology for calculation of the initial value of a fibre asset in section 176.
- 100 The relationship between the IMs to give effect to the BBM, and the other new features of Part 6 that differ from Part 4 of the Commerce Act, will need to be carefully considered. Price-quality paths and regulatory reviews, e.g. are not the focus of the Issues Paper and the IMs process. But it will be important for the Commission to consider throughout how its decisions at the IMs stage may constrain or limit its options in determining ID requirements, PQDs, its recommendations to the Minister, or may be influenced by other requirements under Part 6.

101 For example:

- 101.1 As the Commission has identified, the approach to quality dimension methodologies will need to consider the 'division of labour' among IMs and PQDs, and also the provisions for the Minister to prescribe the conditions of any service for setting quality requirements (we comment on this aspect further later in this submission);
- 101.2 The rules for defining prices and other requirements for mandatory services will need to take account of the constraints on the Minister's ability to prescribe those prices;
- 101.3 The requirement to unbundle will affect competition, but the outcomes are uncertain; and
- 101.4 The initial IMs' coverage will need to be sufficient to inform any regulatory review relating to anchor services before RP1 commences.
- There are also potential sequencing and timing issues that will make it challenging to coordinate the various regulatory mechanisms in Part 6. IMs are to be determined first, followed by PQD and ID determinations. There may also be a review of anchor services before implementation. The potential for these processes to overlap substantively and chronologically will need to be carefully managed.

ECONOMIC CONCEPTS AND PRINCIPLES

We agree with the Commission that the economic principles of real FCM, efficient allocation of risk and the asymmetric consequences of over and under-investment are equally relevant to Part 6.

In particular, we don't see any conceptual inconsistency between the real FCM principle and demand and stranding risk associated with the potential for greater competition. Competitive substitution is a risk investors would price into their investment decisions. So it's a risk regulated suppliers would expect to be compensated for *ex ante*. Compensating for these risks *ex ante* doesn't guarantee we will earn a normal return. We remain exposed to the risks of under-recovery to the extent those risks weren't anticipated and emerge only *ex post*. However, the risks associated with the potential for greater competition are risks we face today and so we would expect compensation for them.

The Commission has addressed the treatment of physical or economic stranding of assets as a consequence of service substitution (e.g. through emerging technologies) in the context of Part 4. In short, maintenance of the real FCM principle means that assets do not drop out of the RAB when they are physically stranded, and the risk of economic stranding is addressed by bringing forward asset lives/depreciation. There is nothing conceptually different about the telecommunications sector that requires a different approach to those issues. Real FCM should also guide the Commission in the event of a decision to deregulate. This means the Commission shouldn't remove assets from the RAB if doing so would prevent Chorus from earning a normal return on capital.

The transition to the BBM, and the different circumstances of the UFB network, also warrant revisiting whether there are asymmetric consequences of investment, traditionally addressed by means of a cost of capital uplift. While the Commission concluded during the FPP process there was insufficient evidence to support a cost of capital uplift, the circumstances here are different.

We don't think specific constraints on price structures and/or relativities is required to meet the purpose statement given the other components of the regime.

- 103 In section 6 of the Issues Paper the Commission discusses the key economic principles it has developed in the context of Part 4:
 - 103.1 FCM;
 - 103.2 Efficient allocation of risk; and
 - 103.3 Asymmetric consequences of over and under-investment.
- The key economic principles are a means to an end: the promotion of the long-term benefit of end-users under section 162 or section 166(2). But they are an elaboration of the legislative purpose statement. Accordingly, the Commission should not lightly depart from those key economic principles. In fact, a proper application of the



- purpose statement would require the Commission to respect the key economic principles.
- 105 We set out below our more detailed views on the Commission's key economic principles.

Real financial capital maintenance

- 106 FCM is fundamental to the regulatory framework. As the Commission notes, a typically efficient firm would expect *ex ante* to earn at least a normal rate of return over time. Without this expectation, no investor would choose to invest in providing the regulated service. Accordingly, FCM is necessary to ensure the outcomes in section 162 are achieved.
- 107 The High Court in the IMs Merits Review recognised that FCM, and the related NPV=0 concept, are consistent with achieving the section 52A(1) outcomes (reflected in section 162):¹⁷
 - [263] Thus as with NPV=0, FCM is seen as an outcome consistent with the making of normal but not excessive profits and is therefore an outcome that will also efficiently promote the purpose of, and outcomes sought by, s 52A(1).
- 108 We agree with the Commission that suppliers only have an *ex ante* expectation of maintaining their financial capital in real terms. The Commission explains it gives effect to the FCM principle by:
 - 108.1 Providing appropriate compensation to suppliers for the risks they are required to manage; and
 - 108.2 Using estimates or forecasts of cost of capital, prudent expenditure and demand (where relevant) that are free of systematic bias.
- 109 In this context, the Commission must give careful consideration to:
 - 109.1 The risks we face by participating in the UFB initiative; and
 - 109.2 The expectations underpinning our participation.
- 110 This includes the expectation that we would have an opportunity to earn a normal return on our investment despite the fact that:
 - 110.1 We built substantially ahead of demand; and
 - 110.2 There was substantial risk in participating in the UFB initiative.
- The Commission has asked whether the differences between the telecommunications sector and the Part 4 regulated sector mean there should be a different approach to the Commission's key economic principles. The Commission has pointed to the

¹⁷ WIAL v CC at [256].

greater prospect of competition in relation to FFLAS relative to Part 4 regulated industries. The Commission has highlighted that the allocation of demand risk and the associated risk of economic stranding is likely to be important, and that the Commission may need to remove assets from the RAB if:

- 111.1 Ex ante compensation is provided for asset stranding risk, and some assets are subsequently stranded; or
- 111.2 Workable competition develops in certain areas, leading to de-regulation.
- 112 We do not see any conceptual inconsistency between the FCM principle and the demand and stranding risk associated with a greater potential for competition. Investors would price the risk of competitive substitution into their investment decisions, and therefore it is a risk regulated suppliers should be compensated for ex ante. As the Commission appears to be signalling, this is really just a question of how this risk is addressed in the context of the regulatory framework. We also note that stranding risk is a feature of the Part 4 framework. For example, in relation to EDBs, the Commission in its 2016 IMs Review acknowledged an enhanced risk of stranding due to substitution of new technologies for traditional electricity distribution services. In that context the Commission reaffirmed the FCM principle and provided lines companies with an option to shorten asset lives in order to bring forward recovery of costs associated with exposed assets.
- 113 Although the specifics are different (i.e. we have other constraints which limit the ability to bring forward recovery of costs), the situation we face is not conceptually different.
- 114 Compensating for stranding risks ex ante doesn't guarantee we will earn a normal return. We remain exposed to risks of under-recovery to the extent those risks were not anticipated and emerge only ex post. However, all of the risks the Commission has identified in its Issues Paper associated with the greater potential for competition are risks we face today (to a greater or lesser extent). So we would expect to be compensated for them.
- 115 If assets are subsequently physically stranded through competitive substitution (i.e. there are no customers connected to the relevant asset), those assets remain in the RAB in accordance with the FCM principle. This is orthodox under the Part 4 approach.¹⁸ Leaving the assets in the RAB gives us the flexibility to attempt to recover the cost of our investment (and so achieve FCM) if material competitive substitution occurs. Although our ability to recover the cost of our investment in this situation may be constrained by that competition. If there is a risk of economic stranding, then the Commission has equally developed options to ensure FCM is maintained.
- 116 For the same reasons, the principle of ex ante FCM should also guide the Commission if workable competition were to emerge and de-regulation occurs. This means the

Commerce Commission Input methodologies review decisions Topic Paper 3 [2016], at [72-73]

Commission can't remove assets from the RAB if doing so would undermine FCM. This would require the Commission to, e.g.:

- 116.1 Signal deregulation sufficiently far ahead that we can respond by bringing forward recovery of costs;
- 116.2 Allocate the costs of deregulated assets to keep a proportion in the RAB to ensure FCM is maintained; and
- 116.3 Keep existing deregulated assets in the RAB and make an allocation of unregulated revenues associated with those assets.
- 117 Finally, we would expect to be able to factor the risk of competitive substitution into our demand forecast when setting prices under the revenue cap. To the extent actual demand differs from forecast, this forecast error would be addressed through the wash-up account. We note it was an express policy choice to provide for symmetrical wash-up for just this reason.
- 118 The direction to promote workable competition also means giving us the flexibility to respond to competition at the margins. This should include:
 - 118.1 Flexibility around depreciation methodologies, in order to maximise the potential for recovery of costs that face enhanced stranding risk.¹⁹
 - 118.2 The ability to carry forward under-recoveries under the revenue cap, noting the application of a symmetric wash-up is mandatory under the Act; and
 - 118.3 Pricing flexibility.
- In practice we may not have the flexibility to respond to various types of competition at the margins due to the significant number of restrictions on our services and prices. We should therefore not be required to carry any such demand risk arising from this inability to respond effectively.
- 120 To the extent that other aspects of the framework don't provide an expectation of compensation, remaining risk should be reflected in an uplift to cost of capital. The more constraints the Commission puts on our ability to respond to competition or to ameliorate the consequences of that competition, the greater the stranding threat and the larger the premium needed to compensate for that risk.

Allocation of risk

We agree that risks should be efficiently allocated to suppliers or consumers depending on who is best placed to manage those risks. As the Commission notes, if suppliers aren't compensated for risks outside their control, this may have a negative impact on investment incentives. We should also receive compensation for residual risks we face in circumstances if we can reduce (but not eliminate) the likelihood of an

The Commission has permitted flexibility around depreciation methodologies in the electricity distribution context. Although conceptually similar, the specifics of the situation meant that the enhanced risk of stranding was managed by the option of front-loading depreciation.

- adverse event, or reduce (but not eliminate) the consequences if an event were to occur.
- Section 176(2A), which provides that regulated suppliers should not be protected from all risk of under-recovery, is consistent with an orthodox application of the FCM principle. Section 176(2A) relates to the recovery of the financial losses asset, which allows us to recover in future prices forgone revenues in the period between 2011 and the implementation date. Section 176(2A) simply expresses the principle that Chorus should have an *ex ante* expectation of recovering the full value of the initial financial losses asset, but not an *ex post* guarantee. So, to the extent we fail to recover the value of that asset as a result of an unanticipated event when the price-quality path was set, we can't necessarily expect *ex post* relief. This differs from circumstances where Chorus' lack of flexibility on prices and services due to regulatory requirements prevents us from effectively responding to changes in circumstances.
- 123 Section 176(2A) does not stand for the principle that Chorus is not entitled to factor in the risk of competitive substitution when the price-quality path is set, or when it sets its prices for the year ahead. In other contexts the Commission has already acknowledged it is appropriate for regulated suppliers to factor the risk of competitive substitution into the price-path, as noted above. For example, the Commission allows EDBs to shorten asset lives to reflect the risk of economic stranding due to technology change, which reflects essentially the same principle.

Asymmetric consequences of over and under-investment

- 124 We agree with the Commission that the transition to the BBM and the different circumstances of the FFLAS, as opposed to UCLL/UBA services, mean it's appropriate to revisit whether there are asymmetric consequences of investment. Traditionally the Commission has addressed this asymmetry by means of an uplift to its mid-point cost of capital estimate. This uplift is currently applied by the Commission in respect of electricity and gas under Part 4.
- During the FPP process the Commission concluded there was insufficient evidence to support a cost of capital uplift. However, the circumstances here are different:
 - 125.1 The move to a RAB-based building blocks model, rather than TSLRIC, supports an uplift. In contrast to TSLRIC, the connection between the cost of capital percentile and actual investment incentives is clear; and
 - 125.2 The Commission's conclusion that consumers do not value broadband outages as highly as electricity outages in the FPP process should be reconsidered. This is because reliance on fixed line broadband for a range of in-home services is increasing and, while mobile services are arguably a partial substitute for copper-based fixed line services, the much-increased service quality and speed of fibre services means that mobile services are not an effective substitute. In addition, mobile services are also dependent on our fibre network. A failure of our network can impact both fibre and mobile services in an area.
- However, the discussion in the Issues Paper seems narrowly focused on investment undertaken to avoid service failures. We note the Commission has previously considered whether a higher cost of capital percentile would be appropriate for UCLL/UBA based on the benefits that increased investment will have on accelerating

- innovation, as opposed to preventing major supply issues. ²⁰ A higher cost of capital percentile could send a positive signal to potential investors in fibre and telecommunications. Although this signal was determined to be too weak for copper services under the TSLRIC regulatory model, ²¹ the Commission's test is more likely to be met for fibre under a BBM framework.
- 127 There are most likely to be other investment proposals within the scope of FFLAS that would need to be considered under the Commission's framework for assessment of asymmetric consequences of over and under-investment.

Pricing efficiency

- We don't think there is a case for developing an additional 'pricing efficiency' economic principle for the following reasons:
 - 128.1 A strength of the Commission's key economic principles is they have developed over time through direct experience of implementing the BBM approach in the Part 4 context. Given we are at the threshold of regulation of FFLAS, there is insufficient clarity around either the problem definition or the implications of adopting pricing efficiency as an economic principle. It is also not clear how that principle would be defined in a way that would provide meaningful guidance abstracted from tangible examples.
 - 128.2 The anchor products and the requirement to implement geographically consistent prices constrain our commercial prices. So it is unnecessary to adopt pricing efficiency as an economic principle. Parliament has essentially taken it on itself to establish legislative reference points for pricing Chorus' commercial services.
 - 128.3 In addition, to the extent pricing distorts the market, it is more likely to be a result of anchor prices and the requirement for geographically consistent pricing. So, attempting to hold our commercial prices to an abstract efficiency standard is unlikely to be meaningful when pricing and the distribution of demand are influenced significantly by pricing choices outside our control.

Commerce Commission, 'Cost of capital for the UCLL and UBA pricing reviews – Final Decision', 15 December 2015, page 70.







Commerce Commission, 'Cost of capital for the UCLL and UBA pricing reviews – Final Decision', 15 December 2015, page 67

APPENDIX A

ISSUES FOR EARLY DISCUSSION

129 We set out below our particular comments in relation to the issues specifically raised in the Issues Paper.

REGIME WIDE ISSUES

Issue 1: Scope of regulated services

Establishing a clear understanding of the scope of regulated services is key.

The Commission's suggestion that the regulated services may include any "services that support the operation of a network or its users" is overly-broad. The text and purpose of Part 6 support an interpretation of the definition of FFLAS that is focused on services that enable access to, or interconnection with, the defined fibre network between a POI and end-user's building or access point.

As such, services that are 'over and above' or additional to the services required to support delivery of the regulated services are out of scope, as are backhaul services (including ICABS).

- 130 We agree it's key to establish a clear understanding of the scope of regulated services. It is important that Chorus and the industry have certainty about what services are in or out of the scope of the regulated services, and therefore also what assets should be included in the RAB.
- 131 We also agree with the Commission that:
 - 131.1 The relevant questions to consider when assessing whether an activity or service constitutes a regulated service are set out at paragraph 7.16 of the Issues Paper;
 - 131.2 Where a service is provided in any part over a copper line (excluding the situation where a copper line is in an end-user's premises or building), or is used exclusively in connection with such a service, the service is excluded from the FFLAS definition (paragraph 7.19 of the Issues Paper). This means in practice that services provided over, or that are exclusively used in connection with, Chorus' FTTN network are excluded from the scope of Part 6;
 - 131.3 That a particular line to an end-user may become regulated at a later point if copper connections are upgraded to fibre;
 - 131.4 Services provided above layer 2 may be regulated if they are specified in regulations made under section 222; and

- 131.5 The dynamic nature of the scope of the regulated services, and how assets are used to provide regulated and unregulated services, must be taken into account in prescribing IMs. We think this is a reason why the Commission should prefer flexible, principle based IMs for key issues such as cost allocation.
- 132 However, we think that the Commission's suggestion that the regulated services may include any "services that support the operation of a network or its users" is overlybroad. The text and purpose of Part 6 support an interpretation of the definition of FFLAS that is focussed on services that enable access to, or interconnection with the defined fibre network between a POI and end-user's building or access point, and not beyond this.
- Taking a straightforward example, an in-home wiring service might be said, in a general sense, to be a service that "supports the network's users". However, that service is beyond the ONT at the end-user's building, and is entirely contestable. While we can provide the service, others can and do independently of any telecommunications service to the ONT. It does not enable access to, or interconnection with, the fibre network, and is therefore not a FFLAS.
- The meaning of "enables access to, and interconnection with" a fibre network is language that is deliberately adopted from the definition of other regulated services in Part 2 of the Act. In Schedule 1, which describes the designated services regulated by Part 2, "access services" are defined as "enabl[ing] access to, and interconnection with," a network that connects an end-user building to a handover point. The language used in Schedule 1 distinguishes between:
 - 134.1 Access services (UBA, UCLL (repealed by the Bill), and UCLFS), which are defined as "enabl[ing] access to, and interconnection with," a network (a public data network (PDN) in the case of UBA, the Chorus copper local loop network in the case of UCLL and UCLFS) that connects an end-user building to a handover point (the first data switch in the case of UBA, a handover point in an exchange in the case of UCLL and UCLFS);
 - 134.2 Backhaul services (UBA backhaul, UCLL backhaul Cabinet to Exchange (repealed by the Bill) and UCLL Backhaul Exchange to Interconnection point), which are defined as providing transmission capacity between defined points. In the case of the UCLL Backhaul service, the definition is extended so that the transmission capacity is defined in terms of "for the purposes of providing access to and interconnection with" the UCLL or UCLFS service.
- 135 FFLAS, consistent with its name, adopts the access service formulation used elsewhere in the Act.
- Similarly, the definition of fibre network should be read as a deliberate adaptation of the "network" component of the access service definitions in Part 2 of Schedule 1. Each of these definitions defines a network that connects an end-user site to a handover location:

	Network	that connects	End- user	to	Handover point
FFLAS	Network structure used to deliver telecommunications services over fibre media		End- user's premises, building, or other access point		Fibre handover point
UBA	Fixed PDN		End- user's building		First data switch
UCLL	Chorus copper network		End- user's building		Handover point in telecommunications exchange

- 137 The definition of "fibre handover point" also indicates that the regulated service is a direct connection between an end-user location and the handover point. The handover point is defined as the "specified point of interconnection for the relevant end-user premises, building or other access point." This envisages that an end-user premises will have a specified handover point associated with it and the regulated service is about enabling access to and interconnection with this network. This is, of course, how the UFB network has in fact been built.
- 138 These definitions, as those definitions apply to Part 6, must also be understood in light of Part 6's purpose, which is to promote the long-term benefit of end-users in markets for FFLAS by promoting outcomes for those services consistent with those observed in workably competitive markets. Implicit in this purpose, consistent with the Commission's de-regulatory powers in Part 6, is that regulatory control is to be imposed on services where workable competition would otherwise be absent. In this context, this requires a focus on the UFB access infrastructure and the services that enable access to it.
- 139 Services that simply "support" network operations or network end-users, but which don't themselves enable access or interconnection with the fibre network should therefore be excluded from the FFLAS definition. In addition, services like backhaul can be provided by entities other than Chorus or LFCs, so may already be subject to workable competition.
- 140 There are two implications of this interpretation of the FFLAS definition.
- 141 First, services that are 'over and above' or additional to the services required to support delivery of the regulated services are out of scope. We think that this is consistent with the Commission's approach to emerging technologies for EDBs, where





- some services (e.g. charging electric vehicles) are distinguished from electricity lines services.²²
- 142 Second, backhaul services including the ICABS service are not included in the definition of FFLAS. In the case of the ICABS service, this is consistent with the treatment of ICABS in other regulatory mechanisms, which was and is that ICABS is not subject to the same regulation as other parts of the UFB network because it is subject to workable competition beyond the POI for the DFAS service (the first central office). As such:
 - 142.1 ICABS was not a service required by CIP agreements or subject to a UFB reference offer; and
 - 142.2 ICABS is not subject to Fibre Open Access Deeds in Part 4AA.
- 143 This treatment of ICABS is also consistent with the explanation in the policy papers leading to the introduction of the Bill as part of the Ministerial Review of the Telecommunications Framework. In its review, MBIE emphasised that telecommunications services such as national backhaul were excluded from the review and expected to continue to be subject to Part 2 of the Telecommunications Act, ²³ because domestic backhaul assets operate in markets that are competitive or have the potential for competition. ²⁴ DFAS was distinguished from backhaul on the basis that it was concerned with connecting large commercial users to the network from non-premise access sites. ²⁵

Commerce Commission "Open letter – Our intention to gather information relating to emerging technologies (May 2018), paragraph 30 in Attachment: Regulatory treatment of EV chargers costs and revenue, available at https://comcom.govt.nz/ data/assets/pdf file/0023/90581/Open-letter-Our-intention-to-gather-information-relating-to-emerging-technologies-9-May-2018.pdf

Ministry of Business, Innovation and Employment *Telecommunications Act Review: Options Paper* (July 2016) at pages 21 and 56.

²⁴ Above, at 33.

Above, at 33; Cabinet Paper at [42].

Issue 2: Practical application of s 166(2)(b)

The Commission has identified a potential practical example where the complexities of the Part 6 regime will need to be carefully thought through. However, we're not confident this is a situation where section 162 and section 166(2)(b) require balancing. We think the provisions are complementary in the context of other elements of the Part 6 regulation. These issues are best considered against actual situations that emerge through the IM development process.

We agree with the Commission's general point that section 166(2)(b) will often not require separate consideration from section 162. Situations where it may require separate consideration will depend on the Commission's assessment for actual or potential competition but include, e.g. the Commission's approach to confidentiality requirements for ID regulation.

- We have explained our views on the interpretation and application of sections 162 and 166 in our submission. We agree with the Commission's interpretation, but consider that section 162, as the general purpose statement of the Part, should be given primacy.
- 145 We appreciate the Commission's example of the potential application of its approach to explain its preliminary thinking. It is however, difficult to engage with it in detail, as every application of section 162 and section 166 will necessarily require an exercise of specific judgement in a particular factual context. So we prefer to consider the application of section 166 as and when issues arise in the IMs process, rather than to consider hypotheticals.
- 146 As the Commission notes, its example is one where a number of the aspects of the Part 6 regime come together:
 - 146.1 The IM for evaluating price-quality proposals;
 - 146.2 The quality IM; and
 - 146.3 The setting, by the Minister, of service descriptions and conditions for the layer 1 services that a regulated supplier subject to PQR is required to provide. This is relevant because, for Part 6 to be coherent, investment to meet the service description and conditions of a mandatory service must be recoverable under the IMs promulgated by the Commission.
- 147 Given these interlocking components of the Part 6 regime, it's not clear the Commission's hypothetical situation will arise. This is a situation where it's more likely the section 162 purpose statement and section 166(2)(b), to the extent relevant due to the potential for network competition at layer 2, are complementary rather than in tension.

Issue 3: Matters for which input methodologies are determined

We support the Commission consulting and determining only mandatory IMs for RP1, which would enable us to achieve early certainty. Mandatory IMs are:			
	Cost of capital		
	Valuation of assets		
	Allocation of common costs		
	Treatment of taxation		
	Quality dimensions		
	Regulatory rules and processes, including pass through and recoverable costs, wash up and reopeners.		
	Capex projects		
We also consider that IMs for setting the initial RAB are mandatory.			
We also support the potential for more principles based, rather than prescriptive IMs.			

- Our principal concern is achieving early certainty regarding the key parameters of the new regulatory framework. So we support the Commission's proposal to initially determine only the mandatory IMs listed in section 175(1). We consider that the rules and processes IMs should include IMs for pass through and recoverable costs, wash up and reopeners.
- 149 We are seeking determination of the value of the initial RAB as early as possible. To the extent the Commission considers the initial RAB should be set utilising IMs, we consider those IMs are mandatory under the new regulatory regime. We address the requirements for setting the initial RAB in more detail above, refer to process for developing the fibre input methodologies.
- Development of the cost of capital IM is also a priority for stakeholders, after the initial RAB, as we discussed above.
- 151 We also support the Commission's proposal to explore the potential for more principles based, rather than prescriptive, IMs. A degree of flexibility will be important for RP1, given that Chorus is transitioning into a new regulatory framework. Principles based IMs will mitigate the potential for unforeseen consequences.
- 152 In our view, likely candidates for a more principles based approach include:
 - 152.1 Cost allocation;
 - 152.2 Quality; and

- 152.3 Expenditure.
- 153 We also consider there is a case within some IM topics for an appropriate balance of principled and prescriptive approaches, depending on the nature of the IM. For example, with asset valuation IMs, the roll forward can be principled but initial valuation should be prescriptive. And within Expenditure, a principled approach to categories and criteria is appropriate, but some process requirements should be prescriptive.

VALUATION OF ASSETS INPUT METHODOLOGY

Issue 4: Scope of the regulated asset base and its valuation

We support the high-level approach described by the Commission at paragraphs 7.53 to 7.55 of the Issues Paper: The initial value of fibre assets must be determined in accordance with section 176; New assets should be included in the RAB as of their commissioning date (with certain exceptions); New assets should be included in the RAB at their cost to Chorus determined in accordance with GAAP (again, recognising that there will be some exceptions); The IMs should prescribe rules for particular types of assets, such as intangible leases, works under construction and easement land; and The IMs should permit certain one-off adjustments.

Determining the initial RAB

- 154 As discussed above, gaining early certainty of the value of the initial RAB is a priority issue for us. We think the Commission can and should commence work on this immediately, as setting the initial RAB is a discrete exercise and has minimal interdependencies with other IMs.
- 155 Determining the initial RAB requires the Commission to:
 - 155.1 Determine the initial value of fibre assets under section 176(1); and
 - 155.2 Determine the value of the UFB financial losses asset under section 176(2).
- 156 Both of these require a backward-looking cost allocation exercise, although the nature of the exercise differs because the financial losses asset is limited to the provision of services under the UFB initiative, whereas the initial RAB applies to all fibre assets.
- 157 Cost allocation is addressed in more detail below in relation to the Commission's issues six and seven.
- 158 Determining the value of the UFB financial losses asset also requires the Commission to form a view on the appropriate RROI for the period 2011 to the implementation date. We address this issue below in response to the Commission's issue five (calculation of financial losses and Crown financing).
- 159 The Act prescribes the methodology for determining the initial value of a fibre asset. We agree the directions in section 176 are sufficiently clear about the values to be attributed to assets at the implementation date. However, the Commission has indicated it assumes that accurate accounting records exist for all, or most assets employed in supplying regulated services. Accounting records do of course exist for

- these assets, but the manner in which we have historically recorded fixed assets reflected our regulatory and financial reporting needs at the time.
- 160 Chorus records the value of assets deployed in its Fixed Asset Register, rather than why the asset was built or what services the assets support. We do not have a pre-existing valuation of the fibre network financial records are based on a combined copper and fibre business, as well as access and backhaul services. There are also many shared assets that are used to support a wide range of telecommunications services.
- 161 The consequence is that, in practice, we will have to draw on a range of information sources in order to identify and allocate asset values for the fibre RAB.

Roll-forward

- Apart from the initial RAB, the IMs will also address the valuation of assets for inclusion in the RAB going forward. We agree that the IMs should follow the approach developed by the Commission in the Part 4 context. Specifically:
 - 162.1 New assets should be included in the RAB as of their commissioning date when assets are available for use (with certain exceptions, detailed further below);
 - 162.2 New assets should be included in the RAB at their cost to Chorus determined in accordance with GAAP (again, recognising that there will be some exceptions); and
 - 162.3 The IMs should prescribe rules for particular types of assets, such as intangible leases, works under construction and easement land.
- 163 The Commission has asked what the appropriate degree of granularity to be adopted by suppliers when recording assets in their RAB should be. In practice, there will need to be some degree of disaggregation to reflect different asset lives. However, this will need to be balanced against the practical need to aggregate to some degree to make the process workable.
- 164 The Commission has also asked how assets should enter or exit the RAB due to changes in the scope of the regulated service. The mechanism for this is to:
 - 164.1 Value all assets for the regulated supplier (including fibre, shared, as well as copper) into the unallocated RAB;
 - 164.2 Apply the definition of the regulated service resulting in the allocation of assets to the allocated RAB;
 - 164.3 If there are changes to the scope of the regulated service, then existing assets entering the RAB will already have an agreed value;
 - 164.4 On the treatment of assets used to deliver services that are subsequently deregulated, we don't think this is an issue the Commission needs to resolve for the purposes of RP1. But, as we have discussed above in relation to the Commission's key economic principles, maintenance of FCM in the context of deregulation may require that assets, or an allocation of the relevant values,

remain in the RAB so that the decision to deregulate does not itself undermine the Part 6 purpose statement.

- The Commission has indicated it will develop specific rules for particular asset types. We agree this is necessary and broadly support the rules in Part 4.
- One new area is the rules related to accounting standards changes. For example, we were an early adopter of IFRS16 changes, including where finance leases that were expensed, are now capitalised. These changes have taken place since the last IMs review for Part 4, so we would be looking for the appropriate treatment to be covered in the IMs and principles on how to deal with future IFRS changes.

Issue 5: Calculation of financial losses and Crown financing

We agree with the Commission's proposed approach to the methodologies for valuing the initial financial losses asset.

The Commission cannot assume that the Crown financing has a nil value. Our view is that the financing has a material cost. The Commission should adopt a modified version of Method 1 to accommodate the Commission making an evidence-based assessment of this value.

- 167 We agree with the Commission's proposed approach to the methodologies for valuing the financial losses asset.
- The required approach is prescribed by Parliament in section 176 of the Act, with Parliament having made the significant policy choices as to the inclusion of a financial losses asset and what account should be taken of Crown financing.

(a) Method for calculating financial losses

- 169 We support the Commission's calculation approach for UFB financial losses. We agree the direction to calculate "accumulated unrecovered returns" should be interpreted as requiring a BBM approach.
- 170 Given this, the unrecovered loss period i.e. 2011 to implementation can and should be treated as a single regulatory period. This is consistent with the NIPA agreement which set a forward-looking price path from 2011. In practice, this would mean:
 - 170.1 The RROI should be a cost of capital calculated consistent with the cost of capital IMs. The risk free rate should be set on the basis of a 10 year regulatory period (i.e. 10 year term rates should be used rather than a five year term);
 - 170.2 An allocation of shared asset costs should be included in the financial losses calculation (including pre-demerger assets); and

- 170.3 The scope of the UFB revenue that's deducted from the notional MAR should be consistent with the scope of the costs entering the notional MAR calculation.
- 171 We address the issues of cost allocation and cost of capital in more detail below in relation to the Commission's issues six and seven (cost allocation) and issue eight (cost of capital).

(b) Treatment of Crown financing

- 172 The Commission is required, in determining the financial losses under section 176, to refer to the actual financing costs incurred by the provider (or a related party) in respect of any Crown financing provided for UFB investments. In our case there are no related parties to the funding arrangement. We don't have an opinion on how the Commission should treat other LFC parent companies.
- Our preference for calculating the actual costs of Crown financing is a modified version of Method 1 set out in the Issues Paper. Consistent with the Commission's Method 1, the required return on assets for the relevant year would be reduced by the financing cost that we had avoided through receipt of the concessional Crown financing. The Commission's proposed formula for Method 1 assumes implicitly that this avoided financing cost was equal to the RROI. We address this assumption further below.
- 174 A variant on Method 1 is our preferred approach because it more readily allows for the ongoing adjustment required by section 170A. Modifications will be required to the approach because the Commission cannot assume the actual financing costs are nil. The Commission is required to make an evidence-based assessment of the actual finance costs. We will demonstrate that the Crown financing was not costless.
- 175 The adjustment for Crown financing should reflect the economic benefit to Chorus of the financing received based on the evidence available to the Commission. This cannot be assumed. The cost to Chorus will depend on an assessment of the nature of the Crown financing and the extent of the risk borne by the Crown implicit in the financing terms. Those two factors will determine the return we would have had to pay to investors to secure the same financing commercially.
- 176 We will demonstrate that Crown financing is not costless. In addition to transaction costs, Crown financing came with obligations on the phasing and specification of the roll out, management step in rights, restrictions on our ability to compete with copper services in other LFC areas and penalties for failing to meet connection targets. Some of these obligations and risks are compensated by the UFB financial loss calculation (e.g. building ahead of demand), but others are not (e.g. ex ante risk of penalties).
- 177 Section 170A requires an adjustment to reflect the benefit of Crown financing post implementation of the BBM. This adjustment should be applied only for the duration of the concessional period for Crown financing and should end at the date of repayment or dividend commencement. We think the approach set out above more readily allows for this ongoing adjustment without the need to forecast actual financing costs for the duration of the Crown financing instruments. The methodology for calculating the ongoing adjustment should be specified in the IMs to give sufficient certainty.

COST ALLOCATION INPUT METHODOLOGY

Issue 6: Allocating common costs between regulated FFLAS and other services

Cost allocation for the initial RAB (backwards-looking) is a one-off exercise, which is prescriptive and does not depend on the Commission first determining a forwards-looking cost allocation IM.

For the forwards-looking cost allocation, we support the Commission's proposal of adopting an approach consistent with Part 4 precedent to allocate costs between regulated FFLAS and other services.

We support cost allocation IMs that are principled, rather than an overly prescriptive approach.

- 178 Cost allocation arises in the following contexts:
 - 178.1 The Commission will have to undertake a backwards-looking cost allocation exercise for the purposes of attributing relevant fibre and shared assets to the initial RAB. This will result in an allocated fibre RAB.
 - 178.2 The Commission will also have to undertake a separate but related one-off and backwards-looking cost allocation exercise for the purpose of determining the value of the UFB financial losses asset in the initial RAB. This is a separate exercise because the initial RAB applies to all fibre assets, whereas the financial losses asset relates only to unrecovered returns from the provision of FFLAS under the UFB initiative. In order to apply a building blocks approach to determine unrecovered returns in the period 2011 to implementation the Commission will therefore have to further allocate the fibre RAB (including share assets) to reflect those UFB-related assets.
 - 178.3 Finally, the Commission will have to determine a forwards-looking cost allocation IM to guide allocation of assets and expenditure from the commencement of RP1 onwards.
- 179 In our view the backwards and forwards-looking cost allocation exercises are distinct. The forwards-looking cost allocation IM should be principled rather than prescriptive, and we agree that the Commission can draw on its experience in the Part 4 context.

Cost allocation for the initial RAB

- 180 The backwards-looking cost allocation exercise will result in an allocated initial RAB that includes a value for unrecovered returns in the period 2011 to implementation. This is a prescriptive exercise that does not depend on the Commission first determining a forwards-looking cost allocation IM.
- 181 In our view, the allocation should be done on the basis of causal allocators determined using the best information available. We recognise that there will be limits to this



- approach and that proxies may have to be utilised, but in our view proxies should only be used where a credible causal allocator is not available.
- The selection of allocators will necessarily rely on Chorus information. As a first step in this process, we propose that we prepare a cost allocation model identifying and explaining the allocators that we consider appropriate and supported by evidence for the Commission's review.

Forward-looking cost allocation IM

- The primary role of cost allocation is to ring-fence regulated services from unregulated services, in order to establish a RAB. So it's necessary to allocate costs between those services that are regulated under the FFLAS regime and those that are not (such as copper).
- 184 We support the Commission's proposal of adopting an approach consistent with Part 4 precedent to allocate costs between regulated FFLAS and other services. We support cost allocation IMs that are principled, rather than an overly prescriptive approach.
- 185 The Commission should make use of its existing Part 4 experience using its well established principles and adapt those IMs to this context to the extent possible, making appropriate allowance for the issues identified below.
- 186 Using a principled approach (as opposed to prescriptive) will give us the flexibility to implement cost allocators that best suit our unique circumstances, while ensuring that cost allocation IMs are consistent with the Part 6 purpose.

Relevant features of our business

- 187 Aspects of our business differ from the sectors the Commission regulates under Part 4. These telecommunications specific aspects need to be considered in developing the cost allocation IM:
 - 187.1 We operate one network that includes two technologies, copper and fibre, across the different areas in New Zealand. As a result of this, extensive sharing of network and non-network assets occurs between regulated and non-regulated services. We expect the extent of sharing with copper services will substantively increase in the near future.
 - 187.2 As the UFB roll-out continues, while some assets may not be shared with FFLAS today, they may be shared in future as we continue to deploy fibre in other regions.
 - 187.3 We also expect assets attributable to FFLAS to continue changing overtime. Particularly, as the UFB network expands its coverage and expansion of capacity to meet growing demand within existing geographic coverage areas, the use of an asset may change overtime from the service(s) for which it was originally deployed.
 - 187.4 There is, and has been since 2011, a change in the degree of sharing overtime. Assets may need to be re-allocated to the fibre RAB overtime as customers migrate away from copper and to fibre.

- The cost allocation IMs need to be dynamic to account for the way we use our network assets. So cost allocation needs to take into consideration sharing:
 - 188.1 Between regulated and non-regulated services;
 - 188.2 Between access (in-scope of FFLAS) and backhaul services; and
 - 188.3 Where we share an asset with a third party (e.g. Spark and EDBs).
- 189 This will be a key challenge that we expect to discuss with the Commission further.

Issue 7: Allocating common costs between different types of FFLAS

We don't support an approach that allocates common costs between different types of FFLAS. This would be an overly complex and subjective exercise prior to RP1 given the extent of sharing on our network between FFLAS services. In addition, such an approach is not typical within a BBM – there is no precedent with EDBs or GPBs and nor is such a cost allocation exercise consistent with the standard application of efficiency principles to pricing.

It is difficult to see how a methodology which informs cost-based pricing can be determined under a revenue cap. It's fundamentally incompatible given a revenue cap implies pricing freedom to achieve the MAR within a regulatory period.

In addition, we have other constraints under the regime (anchor product and geographically consistent pricing), which are set irrespective of cost. These mechanisms collapse under cost-based pricing.

- 190 We do not support an approach which allocates common costs between different types of FFLAS. This could involve allocation between the broadband anchor, voice anchor, DFAS and unbundled fibre services, or more granularly, between different technical specifications of those services. Such a mechanism is not typically used within a BBM. There's no precedent with EDBs or GPBs to implement cost allocation on any basis other than between regulated and unregulated services. There is also no clear reason to undertake this exercise in this context.
- 191 In addition, it is well recognised that the standard economic principles for price setting support only a range of plausible cost allocations of cost between services (namely between avoidable and standalone cost). Within this range, efficiency requires consideration of the characteristics of demand, ideally with end-users provided with a menu of offerings to elicit information about those demand characteristics and with the provider having the flexibility to refine offerings over time to respond to that information. Given this, it is difficult to see how a static allocation of costs between regulated services would provide information that would assist in deriving prices that meet the purpose statement.
- This would be an overly complex exercise within the timeframe prior to RP1, driving additional implementation complexity. In particular, this would involve detailed mapping of assets to each of the FFLAS services. An allocation to this level of

- granularity would be subjective given the extent of sharing on our network between FFLAS services.
- 193 To determine a proper allocation would require data covering how the assets are consumed by each of the services, which would be challenging to compile and audit. In addition, given we will need to transition to the new regime, cost allocation also needs to allow for the evolution and improvement over time of the recorded data.
- 194 Lastly, the Commission also appears to be suggesting that allocating costs to different regulated services would inform cost-based pricing. Cost-based pricing of all regulated services is fundamentally incompatible with a revenue cap because a revenue cap implies pricing freedom to achieve the MAR within a regulatory period.
- 195 We also guery the value of a geographic allocation given our requirement to provide geographically consistent pricing. In addition, we have other constraints under this regime, such as the requirements for an anchor product. These mechanisms will be set irrespective of cost. So it is likely that some degree of cross-subsidisation will occur in order to supply these services at the determined prices (i.e. urban areas will subsidise rural). These mechanisms all constrain the MAR under cost-based pricing.
- 196 If the Commission nevertheless considers common costs should be allocated between different types of FFLAS, RP1 is not the appropriate time. Given the complexity involved, there's insufficient time between now and RP1 to undertake a sufficiently robust exercise. The Commission should prioritise the more important allocation of common costs between regulated FFLAS and other services. This is more principled, and in practice a significantly less taxing exercise, and results of which will be much more robust (i.e. it is much easier to identify that an asset is used for FFLAS than to identify which specific FFLAS use it).

COST OF CAPITAL INPUT METHODOLOGY

Issue 8: Using Part 4/FPP approach for fibre regulation

We agree with the Commission's proposal to use the Part 4 approach as a starting point when determining the cost of capital IMs for FFLAS.

FFLAS have some key characteristics which differ from Part 4 utilities and UCLL/UBA. These include the higher levels of systematic risk associated with fibre networks and greenfield deployments, the higher risk of network assets stranding and the exposure to a combination of price-cap and revenue-cap regulation.

In addition, the requirement that determinations made under section 170 must reflect actual costs of Crown financing is a unique feature that has not been tested and applied under the Part 4 approach. This needs to be taken into consideration when determining the relevant cost of capital for FFLAS.

These differences require that some elements of a FFLAS cost of capital methodology depart from the Part 4 and UCLL/UBA FPP approach, e.g. asset beta, leverage, debt premium and percentile estimate.

The cost of capital characteristics discussed below are also relevant to the Commission determining a RROI for unrecovered accumulated returns for the UFB financial losses asset. This RROI should be broadly consistent with the cost of capital applied after the implementation date.

- 197 We agree with the Commission's proposal to use the Part 4 approach as a starting point when determining the cost of capital IMs for FFLAS. This is consistent with the similar underlying statutory provisions.
- 198 As the Commission has recognised, Part 4 is only a starting point. The Commission must consider differences between the respective regulatory regimes and regulated services. It may also be appropriate for the Commission to take into account intrasector factors which affect particular FFLAS providers differently in order to determine an individual cost of capital for the relevant providers. ²⁶ Below, we identify a number of those differences and suggest high level ways in which the cost of capital for FFLAS should reflect those differences.

Differences between FFLAS and other regulated services

199 The expected investor return for FFLAS needs to be understood in the context of telecommunications in New Zealand and the UFB initiative. The UFB initiative has led

The Commission has previously recognised that intra-sector variations may require per-provider adjustments to the cost of capital. See *Revised Draft Guidelines - The Commerce Commission's Approach to Estimating the Cost of Capital*, available at https://comcom.govt.nz/ data/assets/pdf file/0034/95578/Revised-Draft-Guidelines-The-Commerce-Commissions-Approach-to-Estimating-the-Cost-of-Capital-19-June-2009.pdf.





- to significant benefits. We're especially proud of the role we've played (and will continue to play) in bringing better broadband to New Zealanders.
- 200 We face risks that Part 4 suppliers are not exposed to in the same way, including:
 - 200.1 Our status as a privately-owned, publicly-listed, vertically separated FFLAS supplier makes it difficult to find appropriate comparator firms with similar risk profiles;
 - 200.2 The contractual commitment to investment in FFLAS assets limits our ability to adjust our investment to reflect changes in demand and increases the risk;
 - 200.3 The ability of consumers to incrementally adjust their expenditure (e.g. by shifting to a faster or slower product and higher or lower qualities of service) in conjunction with comparatively high elasticity of demand for FFLAS;
 - 200.4 Comparatively low penetration levels, and the risks associated with greenfield deployments;
 - 200.5 Technology risk and demand uncertainty and risks of economic stranding of network assets; and
 - 200.6 Limited ability to reset prices at the end of each regulatory period, due to further obligations on top of the BBM framework (e.g. anchor services).
- 201 Most of these risks also represent departures from the risks associated with legacy copper services such as UCLL and UBA. Where the FPP cost of capital is considered, these differences also need to be taken into account in that exercise.

These differences may be reflected in cost of capital parameters

- We have identified at a high level key ways in which the FFLAS cost of capital could take into account the specific risks associated with FFLAS, namely in comparison to UCLL/UBA and the industry benchmark.
- 203 In particular:
 - 203.1 The <u>asset beta</u> adjustment the Commission has previously accepted that differences in the riskiness associated with particular services will be reflected in different asset betas.²⁷ An adjustment to asset beta is also consistent with regulation of NGA services in Europe and Ofcom's statement earlier this year that "the systematic risk of NGA is likely to exceed that of copper access for the time being", which justified applying a higher beta to BT's fibre access services.²⁸ Where appropriate comparators cannot be identified, and the

Ofcom reached this conclusion on the basis that NGA networks have higher systematic demand risks, higher capital leverage and longer term payoffs than legacy (i.e. copper) networks. See Ofcom, WLA Market Review: Statement – Annexes 17-27, 28 March 2018 at [A20.223]-[A20.237].



Commerce Commission, 'Cost of capital for the UCLL and UBA pricing reviews – Final Decision' 15 December 2015, page 11-13.

- systematic risk associated with FFLAS is being judged against lower-risk telecommunications firms, an uplift should be applied to the asset beta.
- 203.2 The leverage and debt premium may need to take into account the regulatory and contractual framework for FFLAS under the UFB initiative.
- 203.3 The risk free rate should use 10-year New Zealand government bonds when estimating the RROI to be applied in the financial loss calculation for the relevant regulatory period (2011 to implementation).

The percentile estimate should be above the midpoint

- 204 We suggest the Commission applies the Part 4 approach of using a percentile estimate above the midpoint. As with Part 4 services, there are asymmetric consequences to end-users of under-investment as opposed to over-investment. The scope of FFLAS outages is likely to be more material than copper outages as there are few feasible options for substitution of FFLAS.
- 205 However, a focus on investment being undertaken to avoid service failures is overly narrow. The Commission has previously considered whether a higher cost of capital percentile would be appropriate for UCLL/UBA based on the benefits that increased investment will have on accelerating innovation, as opposed to preventing major supply issues.²⁹ A higher percentile would send a positive signal to potential investors in fibre and telecommunications. Although this signal was determined to be too weak for copper services under the TSLRIC regulatory model, 30 the Commission's test is more likely to be satisfied in respect of fibre under a BBM framework.

Implications for "unrecovered accumulated returns"

206 As discussed previously in relation to Issue 5, assessing the value of "unrecovered accumulated returns" for the UFB financial losses asset requires the application of a RROI. We suggest the RROI should be determined using orthodox cost of capital principles, with appropriate adjustments, and will be broadly similar to the cost of capital determined to apply after the implementation date, as implied by section 171.

Commerce Commission, 'Cost of capital for the UCLL and UBA pricing reviews - Final Decision', 15 December







Commerce Commission, 'Cost of capital for the UCLL and UBA pricing reviews - Final Decision', 15 December 2015, page 67.

QUALITY DIMENSIONS INPUT METHODOLOGY

Issue 9: Scope of the quality dimensions input methodology

Our key concern is that regulation should deliver a coherent overall approach to service quality recognising the numerous mechanisms and instruments in the framework which will affect and control service quality.

The quality IM should incorporate broad principles for setting quality measures and standards as well as specific quality dimensions. These dimensions should be permissive rather than mandatory. The broad principles will need to:

- Recognise the numerous other quality control mechanisms and instruments in the framework that affect and control service quality;
- Have a clear relationship to explicit objectives. For example, the principles will need to incentivise the supply of services that reflect end-user demands, ensure appropriate management of regulated assets, and facilitate innovation and differentiation; and
- Be specific, measurable and within the control of the regulated supplier.

In addition, the quality IM should allow for a transitional process for RP1 to ensure a smooth transition to the new framework. Key elements of quality for RP1 are locked-in by legislation and, at the time of transitioning to RP1, our network will be new or incomplete so it will be necessary to identify a baseline of quality standards.

The process for setting quality standards should be closely linked to the process for setting expenditure plans. We support a propose/approve model for developing both expenditure plans and quality standards.

Scope of quality dimensions

- 207 We agree with CEPA's report that quality regulation should focus on output measures, rather than prescribing the use of particular inputs. This approach provides some flexibility in how required outcomes are delivered. In addition, as the UFB networks are relatively new and have been built to certain specifications under the CIP agreements, the input risk to quality (such as under-investment) may be lower than in other regulated sectors.³¹
- 208 If the quality IM is to specify dimensions, it is important those dimensions are aligned with what matters to consumers and take account of the quality regulation covered in

The Commission acknowledges this at paragraph 7.104 of its paper.

- other instruments, such as anchor service regulations, DFAS and unbundled regulations, open access deeds and a number of regulated codes.
- 209 CEPA suggests that fibre quality dimensions can be grouped into six broad categories reflecting the product lifecycle of the services.³² Product lifecycles are a useful construct. However, given the number and scope of other instruments already regulating quality, the IMs should only focus on the end of the product lifecycle: specifically availability and performance.
- 210 Availability and performance are two aspects better assessed at a network level to indicate whether the regulated asset is being appropriately managed. This is probably the only objective of quality regulation that would not fully be achieved by other instruments. We note "performance" is potentially very wide so further specification of this dimension may be required in order to ensure sufficient predictability. To do so it may be preferable to specify "management of congestion" as the relevant dimension.
- 211 We understand some of the features regulating the quality of services provided by us are unlikely to apply to other LFCs, most importantly anchor services. Nevertheless, we don't think this necessitates expanding quality dimensions in the IM to cover the entire product lifecycle. We expect there are a number of factors that will ensure the other LFCs have incentives to provide high quality services. Those factors include:
 - 211.1 Other requirements on LFCs (such as unbundling, EOI, non-discrimination, and reference offers);
 - 211.2 Competition from other networks; and
 - 211.3 The countervailing power of the major RSPs, which are significantly larger in scale and have greater resources than the other LFCs.
- 212 At the very least, the different overall regulatory pictures for us and the other LFCs reinforce the importance of incorporating a principle of no duplication in the quality dimensions IM.

Level of prescription in IM

- 213 CEPA correctly identifies the key challenge in developing the IM is striking a balance between achieving the flexibility required to accommodate new services and changing consumer requirements, and providing sufficient certainty on the application of the ID and price-quality regimes.
- 214 Prescribing quality requirements carries particular risks. Fibre services are expected to evolve over time in accordance with market developments and consumer demands. So, setting network quality requirements which are rendered inappropriate by subsequent market developments are harmful as they constrain all services.

Those product categories are ordering, provisioning, switching, faults, availability and performance.







- 215 In contrast, an anchor service which no longer meets requirements does not carry the same potential for harm. Given the fast moving pace of telecommunications markets, customer requirements should be reflected in Service Level Agreements (**SLAs**) baselined by anchor services. We agree with CEPA's acknowledgement that the anchor service regulations may obviate the need to specify certain quality requirements through the IM process.³³
- 216 It's also important that network quality requirements don't preclude service innovation and differentiation. Extensive network quality requirements could stifle innovation and collapse the service differentiation policymakers have recognised as desirable. While this is also a risk with anchor services, the universal application of network quality requirements magnifies that risk. The importance of service differentiation in promoting vibrant retail competition and ensuring that the diverse requirements of end-users can be met is also acknowledged in the CEPA report.³⁴
- Balanced against these risks is the Commission's obligation under section 175(2)(a) to ensure the IMs set quality dimensions in sufficient detail so that each affected provider is able to estimate the material effects of the methodology.
- We broadly agrees with CEPA's suggested level of prescription required in the IM. We support an IM that sets out broad principles that apply to the fibre providers' service provision, together with more specific dimensions where the Commission might choose to (but does not have to) set quality measures or standards.
- 219 The Commission should set broad principles that:
 - 219.1 Recognise the other regulatory obligations to which providers are subject and not duplicate any obligations or measure/constrain matters that are measured/constrained elsewhere. For example, anchor services, DFAS and unbundling obligations are explicitly features of PQR under section 192 so quality standards are just one part of achieving the purpose of PQR in section 191 and section 162(b);
 - 219.2 Have a clear relationship to a specific objective of quality regulation. For example, the principles should:
 - (a) ensure incentives to supply of services that reflect end-user demands;
 - (b) ensure appropriate management of the regulated asset; and
 - (c) facilitate innovation and differentiation by the regulated supplier;
 - 219.3 Reflect regulatory best practice. Measures and standards should be specific, measurable and within the control of the regulated supplier.

³³ CEPA report, section 6.2.

³⁴ CEPA report, section 6.2.

- 220 We emphasise the importance of codifying the principle of no duplication in the IMs as described above. CEPA's survey of comparable jurisdictions illustrates just how intense and multifaceted the New Zealand regulatory framework for wholesale services is especially for a market where structural remedies are in place. In that context it's vital the IMs facilitate a coherent overall approach to quality regulation. Ultimately, consumers will bear the costs of compliance with incoherent or unnecessarily intrusive rules.
- 221 In addition to general principles, the IMs could also incorporate specific quality dimensions where the Commission could choose to set measures or standards. These dimensions should be permissive rather than mandatory, recognising that measures and/or standards for all dimensions may not be appropriate. In order to deliver the predictability required by section 175(2)(a) the specific dimensions should also be restrictive i.e. they should narrow the scope of the measures and standards which can be set under a section 170 determination. As discussed above, the specific quality dimensions which could be recognised are availability and management of congestion (performance).

Process for developing measures and standards

- As quality and expenditure are causally linked, the process for setting quality measures and standards needs to align with the process for setting expenditure plans. We support a propose/approve model for developing both expenditure plans and quality measures and standards. There should be consultation to determine consumer requirements (in conjunction with consultation on an expenditure proposal), although we note that this should not be required for RP1 where the key elements of quality are locked-in by legislation.
- The CEPA report identifies two broad approaches for stakeholder input in setting quality standards: regulator-led and industry-led. The IMs construct necessarily means that the process will be partly regulator-led. In other words, the Commission sets the IMs which can specify, to some extent, quality requirements. The propose/approve model for setting measures and standards under the IMs introduces an element of industry-led process resulting in a blended model overall. We think this strikes the right balance. We are concerned that an industry-group led approach as described in the CEPA report would not be as productive as the blended process we have described.
- The Issues Paper does not acknowledge the different incentives of RSPs buying different services e.g. those buying unbundled layer 1 products and those buying inputs to support mobile networks to compete with fixed access. This dynamic will occasionally produce perverse incentives as to the desirable quality requirements (and consequent expenditure) on regulated suppliers. It is better for regulated suppliers to determine consumer requirements, align those requirements with retail quality requirements and propose appropriate quality measures and standards.

Approach in Regulatory Period 1

- The IMs should allow for a transitional process for RP1 for setting of quality measures and standards. We suggest there should be reporting obligations in RP1 rather than strict targets, in order to establish baseline performance.
- 226 This is appropriate because:

- 226.1 It will be important to have a smooth transition to the new framework. This is clearly a key priority for policymakers, evidenced by specific requirements for existing UFB prices, as well as specifications and conditions to carry over into the new framework through DFAS and anchor services. There is a clear intention that quality remains stable for RP1. This also means that no consultation on quality standards is necessary or appropriate prior to RP1;
- 226.2 As the build has progressed, new areas with fibre access are more remote and distant from areas where technicians are based. In addition, the requirement to unbundle the PON fibre network for the first time will result in more 'hands in the network'. This means performance against quality measures to date doesn't necessarily provide a reliable baseline for appropriate quality standards moving forward;
- 226.3 We are seeking a streamlined approach to setting of initial IMs to facilitate certainty as to the RAB and cost of capital as soon as possible. The IM should allow the initial measures/standards setting to take place very quickly in order to ensure the framework is ready by the statutory deadline.
- 227 Transpower's transition to its first regulatory period is a useful benchmark. We suggest adopting a similar approach to that used for Transpower's transition. In particular, for RP1:
 - 227.1 Quality targets should not be linked to revenue. In Transpower's first regulatory period none of Transpower's four (service performance) quality targets were linked to revenue. Instead, Transpower was obliged to report against the targets (which had associated caps and collars) so that the Commission could assess what the impact would have been if there had been any revenue reward or penalty linked to them.
 - 227.2 Quality regulation should focus on targets rather than strict standards. In Transpower's first regulatory period it had quality targets that were not themselves "quality standards". The quality standards (which the Commission is required to set) were limited to requirements for Transpower to report against the relevant quality measures. As long as Transpower fulfilled the reporting requirements, any failure to achieve a quality target was not significant from a compliance perspective.



CAPEX AND REGULATORY PROCESSES AND RULES INPUT METHODOLOGIES

Issue 10: Input methodologies that support the setting of pricequality paths

We agree the IMs will need to address the process and information requirements for submitting and evaluating a price-quality path proposal:					
	We support the Commission's preliminary view for a propose/approve approach to price-quality;				
	Requirements for the price-quality path proposal and evaluation criteria should be principled rather than prescriptive;				
	Consumer consultation and an independent verifier should be part of the framework, but consultation a requirement for RP1;				
	Incentive mechanisms should be deferred to RP2, given we have yet to transition from the build phase to steady state, and there is considerable scope for forecast error.				

Setting of price-quality paths

- 228 We agree with the specific matters the Commission is required to consider, including:
 - 228.1 The price-quality path to be set prior to the implementation date, specifying our MAR for RP1 and a wash-up mechanism for any over or under-recovery;
 - 228.2 The application of a smoothing mechanism to minimise financial hardship to Chorus or price shocks to consumers; and
 - 228.3 The option to include incentives to maintain or improve the quality of supply.
- 229 We also agree the IMs relevant to the setting of the price-quality path are:
 - 229.1 Cost of capital, asset valuation, cost allocation and taxation for specifying how building block costs will be determined;
 - 229.2 The quality IM to inform quality standards;
 - 229.3 Rules and processes to cover pass-through costs, recoverable costs, as well as requirements to be met by us and the Commission for proposing and evaluating a price-quality path; and
 - 229.4 The capex IM.
- 230 In addition reopeners are relevant to setting the price-quality path. We support the Commission's suggestion that the IMs could specify the circumstances in which a







- price-quality path can be reconsidered within a regulatory period. 35 The circumstances warranting reconsideration of the price-quality path should be broadly similar to those for EDBs. 36
- The Commission may want to include mechanisms that cannot practically be implemented before the implementation date. Therefore transitional measures would enable the Commission to facilitate a timely transition to PQR for RP1, while recognising our asset management practices are still moving towards a more mature state (and may therefore change during RP1).

Price-quality path proposal

- We agree with the Commission's preliminary view for us to submit a price-quality path proposal similar to CPPs and IPPs. Rather than the highly prescriptive and predefined information requirements of the CPP IMs, we support an approach more closely modelled on Transpower's IPP.
- 233 Prior to submission of the price-quality path proposal we would agree with the Commission:
 - 233.1 How capex and opex categories are specified, and the level of detail of specification required in the proposal;
 - 233.2 The specification of regulatory templates; and
 - 233.3 The suite of asset management and other supporting information required to support the price-quality proposal.
- A key issue for us is getting early visibility on the Commission's preferences so we can incorporate them into our proposal preparation. Based on the Commission's current timetable, our proposal will have to pre-date finalisation of the IMs.
- As per our earlier section on requirements for price-quality proposal, the Commission may use its discretionary power to allow a price-quality path proposal for RP1 to have less granular requirements, with a fuller proposal for RP2 to line up with our increasing asset management maturity.

Evaluation of the price-quality path proposal

- The Commission's evaluation criteria when considering the price-quality path proposal should be principles-based and not overly prescriptive. The following broad criteria may be useful:
 - 236.1 Consideration of whether the proposal promotes the Part 6 purpose;

At para 7.121.3.1 of the Issues Paper.

Under Subpart 6 of the Electricity Distribution Services IM.

- 236.2 An objective against which the Commission can assess the price-quality path proposal (e.g. that capex should reflect efficient costs that we, acting prudently, would need to incur to meet demand at appropriate service standards);
- 236.3 A link between expenditure and quality (i.e. that the proposed price-quality path is appropriate in light of the proposed service levels); and
- 236.4 From RP2, whether there is consumer support for the price-quality trade-off.

Historical and forecast information

- 237 Based on Part 4 proposals (such as Transpower's RP2 proposal, and Powerco's CPP proposal), information in the price-quality path proposal would likely include:
 - 237.1 A set of expenditure forecasts, drawn from our internal forecasting processes, consistent with relevant requirements;
 - 237.2 Historical expenditure information drawn from our current financial systems and aligned with our expenditure forecasts;
 - 237.3 An asset management plan or equivalent documentation; and
 - 237.4 Relevant supporting policies and background material, such as investment decision policies and procurement approaches.
- The approach in the CPP IMs of comprehensively setting out historic and forecast information requirements is unduly rigid and unnecessary given that we will be the only supplier subject to a price-quality path under Part 6. The approach used for Transpower is more suitable. We would therefore anticipate agreeing regulatory templates and information requirements with the Commission in advance of submitting our proposal.
- We recognise the need for our forecasts to be robust. As a business we are transitioning our systems and processes to support extended forecast periods. Historically our forecasts have focused on a three year period. While we have developed longer forecasts for some asset portfolios, this is not the case for our total expenditure. Balancing the need for our first price-quality path proposal to cover at least RP1 with our current capability, we believe five years of forecast expenditure should be provided as part of RP1 proposal. This could then be extended to 7 to 10 years in subsequent periods.

Consumer consultation and independent verifier

- 240 Similar to the CPP and IPP process, we think it is appropriate for us to consult with consumers on its proposed price-quality path. The IMs should set out what consumer consultation process will be required and how consumer input should be evaluated in formulating expenditure and quality planning.
- 241 However, this consultation requirement should not begin until RP2, given the tight timeframes between finalising the IMs process and setting the PQD. Consultation

- should be meaningful and consumers require reasonable time to consult, which may not be available if consultation is mandatory during RP1.
- We support the use of independent verifiers in the price-quality path proposal process. Again due to timing constraints the terms of reference could be agreed voluntarily (i.e. not yet required by IMs) with the Commission for RP1 to address the transition to the new regime.

Totex

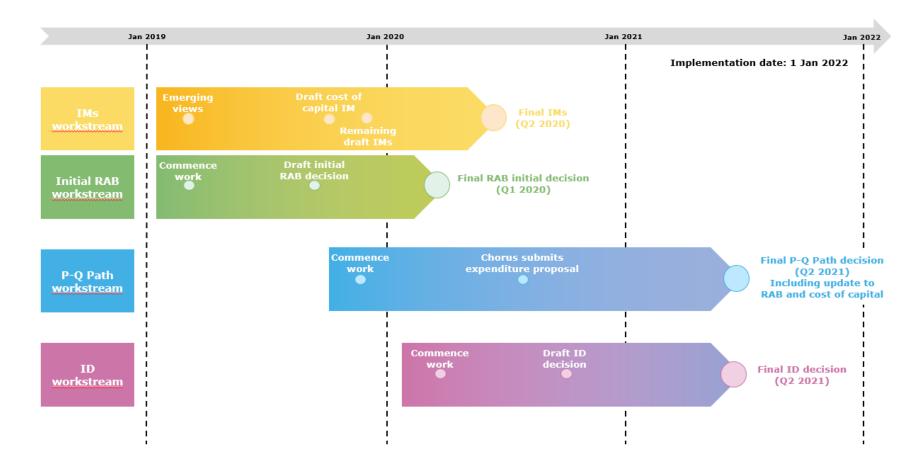
- 243 We do not support the introduction of a totex approach to setting expenditure allowances.
- The purpose of the totex regime in the UK was to create an incentive scheme as neutral as possible between capex and opex in order to encourage suppliers to make efficient trade-offs rather than to default to capex solutions. The adoption by UK regulators of totex was also intended to effect a cultural change in utilities (i.e. perceived to be staffed by engineers who knew only networks). There is no comparable impetus for the adoption of a totex approach for Chorus, as we are unlikely to face significant opex-capex trade-offs, and the risk of regulatory error is insufficiently understood.

Incentive mechanisms

- The Commission has asked whether additional incentive mechanisms (such as an IRIS) should be included in the IMs. We believe, on balance, incentive mechanisms should be implemented for RP2 rather than RP1 for the following reasons:
 - 245.1 Design and implementation of incentive mechanisms will be a significant workstream;
 - 245.2 They are not essential to the implementation of PQR for RP1, as demonstrated by later application of incentives in Part 4 (e.g. EDBs);
 - 245.3 An incentive regime is unlikely to be a material driver of our behaviour in the short (three year) RP1 period; and
 - 245.4 Our network is still in the build phase and has not yet transitioned to operate and maintain. There is significant risk of forecasting variance. So deferral to RP2 will provide time for better baselining of our forecasting.

APPENDIX B

PROPOSED PROCESS DIAGRAM



APPENDIX C

Responses to questions

Q1 What changes to our process (if any) would you suggest to enhance the opportunity for you, and other stakeholders, to provide input and views to us as we develop the fibre input methodologies?

As set out in our submission, and in response to Question 2, we seek early certainty of the initial RAB and cost of capital.

While the implementation date has been deferred to 1 January 2022, we propose the following process changes:

- Bringing forward the emerging views paper and/or combining it with the second process paper;
- Preparing and releasing emerging views and draft determinations in staggered tranches;
- Providing an early indication of those aspects in Part 4 IMs that can be quickly adapted for telecommunications; and
- Commencing work on the new ID regime earlier (between the draft and final IMs)
 as we and other LFCs will need sufficient time to develop systems and processes to
 comply with new ID requirements.

For more information, refer to section *Process for developing the fibre input Methodologies*.

Q2 What input methodologies (if any) could be progressed to draft or final decisions earlier to provide more certainty to stakeholders on the new fibre regulatory regime?

We propose bringing forward the following IMs for stakeholder certainty. Conversely, there does not appear to be any significant downside in accelerating the development of these:

- Initial RAB and cost of capital early certainty is critical to us, our investors and shareholders, and other market participants. While the Commission is required to consider a number of issues, these are discrete from the remaining IMs. The Commission can proceed now to determine the initial RAB and cost of capital. Priority, if necessary, should be on completing the initial RAB and then the cost of capital.
- Price-quality path requirements early visibility of, or an agreed way forward to accommodate, the Commission's anticipated requirements for price-quality path proposals, so we can incorporate those expectations into our planning.

For more information, refer to section *Process for developing the fibre input methodologies*.

Q3 What are your views on our proposed interpretation of 'end-users of telecommunications services' in s 162 and s 166(2)(b)?

We agree with the Commission's approach to the interpretation of 'end-users of telecommunications services':

- It requires the Commission to focus on the long-term benefit of the ultimate recipient of the service or another service whose provision is dependent on the service, rather than intermediate acquirers such as RSPs; and
- The second part of the definition of an end-user is most relevant given the restrictions on retail supply of telecommunications services by us and other LFCs. The interests to be promoted are those of the end-users as users of FFLAS, not the broader interests of those users as participants in New Zealand's wider economy.

Q4 What are your views on our preliminary views on how s 162 and s 166(2)(b) interact?

We agree with the Commission that the objectives will be complementary rather than competing, and in practice, section 166 objectives will be met if they promote the section 162 outcomes. Promoting outcomes consistent with section 162 for FFLAS will promote effective retail competition for the long-term benefit of end-users.

However, if a balance between the objectives is required, the section 162 purpose statement should be given primacy.

For more information, refer to section *Purpose statements*.

Q5 What are your views on our preliminary view on how s 173 applies when we set the input methodologies?

We agree with the Commission's approach under section 173.

Under Part 4, the Supreme Court and High Court have confirmed the importance of IMs, and the Part more generally, is to promote certainty. Consistent with this, a key purpose of Part 6 was to enhance certainty and regulatory stability for telecommunications service providers.

We acknowledge this does not mean absolute certainty. Regulatory certainty is "conceptually subordinate" to the central purpose in section 162 of the long-term benefit of end-users, but "a materially more certain input methodology is to be preferred to a less certain input methodology".

Q6 What are your views on our preliminary view that a BBM approach similar to that adopted under Part 4 would best give or be likely to best give effect to the objectives in s 166?



We agree the Commission should adopt a BBM approach under Part 6. As the Commission correctly notes, the framing of the legislation, together with the key legislative history – including the Minister's review under section 157AA – demonstrates that Parliament contemplated that a BBM would be adopted.

For more information, refer to section Building Block Model approach.

Q7 How relevant to the fibre input methodologies are the three key economic principles used under Part 4?

We agree with the Commission that the economic principles are equally relevant to Part 6:

- **FCM** is fundamental to the regulatory framework. In the absence of this expectation, no investor would choose to invest in the provision of a regulated service;
- Efficient allocation of risk between suppliers and end-users depending on who is best placed to manage that risk;
- Asymmetric consequences of over and under-investment should be revisited due to the different circumstances between FFLAS and UCLL/UBA services.

For more information, refer to section *Economic concepts and principles*.

Q8 How does the prospect of infrastructure-based and access-based competition affect the application of the three economic principles in the fibre input methodologies?

We don't see any conceptual inconsistency between the FCM principle and the greater prospect of infrastructure and access-based competition in the telecommunications sector as compared to other regulated sectors.

Competitive substitution is a risk investors would price into their investment decisions, and therefore a risk that regulated suppliers should be compensated for *ex ante*. Compensating for these risks *ex ante* does not guarantee we will earn a normal return. We remain exposed to risks of under-recovery to the extent those risks weren't anticipated and emerge only *ex post*. However, the risks associated with the greater potential for competition are risks we face today and therefore we would expect to be compensated for them.

For more information, refer to section *Economic concepts and principles*.

Q9 What other economic principles should we have regard to when developing the fibre input methodologies? For example, should we include pricing efficiency as an economic principle for fibre?

A pricing efficiency principle is not necessary or appropriate given our pricing is constrained by anchor services and the requirement to implement geographically consistent pricing.

For more information, refer to section *Pricing Efficiencies*.

010 What are your views on our approach to determining the activities and/or services that fall within the scope of FFLAS (including the treatment of copperbased services, POIs, and services provided above layer 2)?

We agree with the Commission's proposed questions to assess whether an activity or service is a regulated service. We also agree that whether particular lines fall within the definition is likely to change as technology develops.

However, we think the Commission's suggestion that the regulated services may include any "services that support the operation of a network or its users" is overly-broad. The text and purpose of Part 6 support an interpretation of the definition of FFLAS that is focussed on services that enable access to, or interconnection with, the defined fibre network between a POI and end-user's building or access point, and not beyond this (e.g. ICABs is a backhaul service so out of scope).

For more information, refer to section Issue 1: Scope of regulated services.

Q11 Are there any further key implications of the scope of regulated services for the setting of input methodologies for price-quality or information disclosure regulation?

We support the Commission adopting principle based IMs that are enduring, as flexibility is required where assets can be used for different services over their lifetime. This means assets and services can change from in scope to out of scope (and vice versa).

Q12 Do you agree with our application of s 166(2)(b) in practice as illustrated in the example? Where else may s 166(2)(b) be relevant in setting input methodologies?

We're not confident the Commission's example is actually a situation where section 162 and section 166(2)(b) require balancing, rather than being complementary in the context of other elements of the Part 6 regulation. These issues are best considered against actual situations that emerge through the IM development process.

Situations where it may require separate consideration will depend on the Commission's assessment for actual or potential competition but include, as an example, the Commission's approach to confidentiality requirements for ID regulation.

For more information, refer to section Issue 2: Practical Application of s 166(2)(b).

Q13 What are your views on our proposal to determine only those input methodologies listed in s 175(1) by the implementation date? What additional



matters should be determined as input methodologies by the implementation date?

We support the Commission's proposal to determine only mandatory IMs for RP1.

In the interests of timing and quality of decision-making, the Commission should focus on the core aspects of the BBM, and revisit non-core issues in the course of RP1 in anticipation of RP2.

For more information, refer to section *Issue 3: Matters for which input methodologies are determined.*

Q14 Which of the fibre input methodologies (if any) do you consider most appropriate for us to consider the use of a more 'principle-based' specification?

We support the potential for more principles-based, rather than prescriptive IMs in order to provide for greater flexibility and mitigate the need for ongoing technical fixes to the IMs.

IMs that suit a more principles-based approach include: cost allocation, quality, and the requirements for price-quality path proposals.

We consider there is a case within some IM topics for an appropriate balance of principled and prescriptive approaches, depending on the nature of the IM. For example with asset valuation IMs, the roll forward can be principled but initial valuation should be prescriptive.

Q15 What are your views on our proposal to use a high-level approach consistent with Part 4 for the asset valuation IM? Please note that we have not yet set out our views on the treatment of depreciation or asset revaluations.

We support the high level approach described by the Commission in the Issues Paper.

Gaining early certainty of the value of the initial RAB is a priority for us. We think the Commission can, and should, commence work on this immediately, as setting the initial RAB is a discrete exercise and has minimal interdependencies with other IMs. While we acknowledge the regulations under section 222 (prescribing who is subject to PQR and/or ID and the relevant FFLAS) have not been made we don't believe this should impede this particular process.

We would like to understand the Commission's proposed process, including the provision of information to support this, and timing for setting the initial RAB.

For more information, refer to section *Issue 4: Scope of the regulated asset base and its valuation.*

Q16 What are your views on our proposed approach to adopt cost as the measure of asset value for assets constructed or acquired after implementation date?





Cost is the appropriate measure to value assets constructed or acquired after the implementation date.

Regulatory precedent in Part 4 utilities is for the value of a commissioned asset to use the cost to the regulated supplier (determined by using GAAP to the asset on the commissioning date), when assets are available for use.

Q17 What specific rules or approaches (if any) are needed for the treatment of particular types of assets, or to deal with practical aspects of asset valuation?

Principles on how to deal with future IFRS changes are required. We were an early adopter of IFRS16 changes, including where finance leases that were expensed, are now capitalised. These changes have taken place since the last IMs review for Part 4, so we are looking for the appropriate treatment of IFRS changes to be covered in the IMs.

Q18 What are your views on our interpretation and proposed application of ss 176(2) and (2AA) for the calculation of financial losses? In particular:

Q18a What is your view on any simplifying assumptions for the allocation of common capital and operating expenditure costs that should be applied? and

Q18b What are your views on how the rate of return on investment and discount rate for the loss period should be calculated?

We support the Commission's calculation approach for UFB financial losses. We agree the direction to calculate "accumulated unrecovered returns" should be interpreted as requiring a BBM approach.

Cost allocation should be done on the basis of causal allocators determined using the best information available. We recognise that there will be limits to this approach and that proxies may have to be utilised, but in our view proxies should only be used where a credible causal allocator is not available.

The selection of allocators will rely on Chorus information. We propose we prepare cost allocation for the Commission's review, by identifying and explaining the allocators that we consider appropriate and supported with evidence.

The RROI should be a cost of capital calculated consistent with the Commission's cost of capital IMs. The risk free rate should be set on the basis of a 10 year regulatory period (i.e. 10 year term rates should be used rather than a 5 year term).

For more information, refer to section *Issue 5: Calculation of financial losses and Crown financing*.

Q19 What preference do you have regarding the two methods outlined above for reflecting the actual costs of Crown financing, and why? What other methods could be used?

The Commission should adopt a modified Method 1 to assess the value of Crown financing because the Commission cannot assume that the Crown financing has a nil value. Our





view is that the financing has a material cost. Method 1 would accommodate the Commission making an evidence-based assessment of this value.

For more information, refer to section *Issue 5: Calculation of financial losses and Crown financing*

Q20 How should we consider the involvement of related parties to the funding arrangements (e.g. LFC parent companies)?

Not relevant to Chorus.

Q21 Are there other approaches to allocating costs between regulated FFLAS services and other services that could be used? Are there features of suppliers or services that require particular consideration (e.g. business structure, presence of other forms of economic regulation, accounting systems etc.)?

The Commission is required to determine cost allocation for:

- Initial RAB backwards-looking cost allocation methodology for the purposes of determining the initial RAB for FFLAS; and
- BBM forwards-looking cost allocation methodology to apply from implementation.

It is not necessary for the same methodology to apply in both cases. The initial RAB is a one-off exercise, where cost allocation can be prescribed and is not reliant on the Commission determining a cost allocation IM.

For the forward-looking cost allocation IM, we support the Commission's proposal of adopting an approach that is consistent with Part 4 to allocate costs between regulated FFLAS services and other unregulated services. We support using a principled approach using well established Part 4 principles and adapting those IMs to this context.

For more information, refer to section *Issue 6: Allocating common costs between regulated FFLAS and other services.*

Q22 What views do you have on whether an input methodology for allocating costs between different FFLAS services should be set for information disclosure and/or price-quality regulation?

We don't support an IM for allocating costs between different types of FFLAS for ID or PQR. This would be an overly complex and subjective exercise prior to RP1 given the extent of sharing on our network between FFLAS services. In addition, such an approach is not typical within a BBM – there is no precedent with EDBs or GPBs.

It is difficult to see how a methodology which informs cost-based pricing can be determined under a revenue cap. It's fundamentally incompatible given a revenue cap implies pricing freedom to achieve the MAR within a regulatory period.

In addition, we have other constraints under the regime (anchor product and geographic consistent pricing), which are set irrespective of cost.

For more information, refer to section *Issue 7: Allocating common costs between types of FFLAS*.

Q23 What is your view on our proposal to use the Part 4 and UCLL/UBA FPP approach as the starting point when determining the cost of capital input methodologies for FFLAS?

We agree with the Commission's proposal to use the Part 4 and UCLL/UBA FPP approach as the starting point when determining the cost of capital input methodologies for FFLAS.

However, FFLAS have some key characteristics which differ from Part 4 utilities and UCLL/UBA, which mean some elements of a FFLAS cost of capital methodology will need to depart from the Part 4 and UCLL/UBA FPP approach.

As discussed in response to question 18, assessing the value of unrecovered accumulated returns will require the application of a RROI. We suggest the RROI should be determined using orthodox cost of capital principles, with appropriate adjustments, and will be broadly similar to the cost of capital determined to apply after the implementation date.

For more information, refer to section *Issue 8: Using Part 4 / FPP approach for fibre regulation*.

Q24 What matters do you think will differ from the Part 4 approach, are novel for the regulated fibre sector, or will require re-estimation/a different approach? Should we re-estimate parameters that apply across sectors, such as the TAMRP?

FFLAS have some key characteristics which differ from Part 4 utilities and UCLL/UBA. These include the higher levels of systematic risk associated with fibre networks and greenfield deployments, the higher risk of network asset stranding and the exposure to a combination of price-cap and revenue-cap regulation.

In addition, the requirement that determinations made under section 170 must reflect actual costs of Crown financing is a unique feature that has not been tested and applied under the Part 4 approach, and it needs to be taken into consideration when determining the relevant cost of capital for FFLAS.

These differences require that some elements of a FFLAS cost of capital methodology depart from the Part 4 and UCLL/UBA FPP approach, e.g. asset beta, leverage, debt premium and percentile estimate.

For more information, refer to section *Issue 8: Using Part 4 / FPP approach for fibre regulation.*

Q25 What are your views on CEPA's advice on the approach to setting the quality dimensions input methodology?

Our key concern is that regulation should deliver a coherent overall approach to service quality recognising the numerous mechanisms and instruments in the framework which will affect and control service quality.

The quality IM should incorporate broad principles for setting quality measures and standards as well as specific quality dimensions. These dimensions should be permissive rather than mandatory. The broad principles will need to:

- Recognise the numerous other quality control mechanisms and instruments in the framework that affect and control service quality;
- Have a clear relationship to explicit objectives. For example, the principles will need
 to incentivise the supply of services that reflect end-user demands, ensure
 appropriate management of regulated assets, and facilitate innovation and
 differentiation; and
- Be specific, measurable and within the control of the regulated supplier.

The process for setting quality standards should be closely linked to the process for setting expenditure plans. We support a propose/approve model for developing both expenditure plans and quality standards.

For more information, refer to section *Issue 9: Scope of the quality dimensions input methodology.*

Q26 What specific factors of the telecommunications environment do you think are relevant to setting input methodologies for quality dimensions?

The telecommunications regulatory framework will have numerous mechanisms and instruments (apart from PQR) which will affect and control service quality. Recognition of these in the quality dimensions IM will be key to building coherent and workable regulation.

In addition, several factors specific to the telecommunications environment mean the IMs should allow for a truncated process for setting quality requirements for RP1. This should be based on reporting similar to the approach taken for Transpower in the first regulatory control period. In particular:

- The legislation locks-in key aspects of quality and price for RP1 indicating a strong desire for stability and no shocks on the part of policymakers.
- The Commission recognises the lower risk of quality issues given the network is new and built to Crown agreed specification.
- Since the network is incomplete/new there is no historic data to provide a reasonable basis on which to set a strict compliance standard.

For more information, refer to section *Issue 9: Scope of the quality dimensions input methodology.*



Q27 What views do you have on the approach or processes that should be adopted for setting price-quality paths? For example:

Q27a Should a supplier be required to present a price-quality path proposal? What role would the Commission have in evaluating the proposal?

Q27b What historical or forecast information should be required and where should this information be sourced from? Should the information be subject to customer consultation and/or independent scrutiny or other verification?

Q27c Is there a role for a forecast total expenditure (totex) approach instead of requiring building blocks to be set with reference to capital and operating expenditure?

Price-quality path proposals

Our strong preference is to submit a price-quality path proposal similar to the approach used for Transpower's IPP. We think it is more appropriate for a flexible approach rather than the highly prescriptive CPP approach to be adopted for Chorus. We favour the Transpower approach of agreeing regulatory templates and specifying capex and opex categories at the outset.

A key issue is early visibility on the Commission's proposed requirements to incorporate them into our proposal preparation. This includes Commission's auditing requirements now that we anticipate our financial and regulatory years may be misaligned based on the proposed implementation date of 1 January 2022.

The Commission's evaluation criteria should be principles-based.

The Commission may use its discretionary power to allow a price-quality path proposal for RP1 to have less granular requirements, with a fuller proposal for RP2 to line up with our increasing asset management maturity.

Historic and forecast information

Our preference is for IMs that allow us to propose regulatory templates at the outset of the proposal process, to be agreed with the Commission (as opposed to the rigid and prescriptive approach in the CPP IMs).

Subject to confirmation of the timing of the regulatory year, our preference is to include four years of historical information from regulatory year 2016³⁷ through to regulatory year 2019 inclusive.

Historical			Base	Current Year	Forecast	RCP1 Period			
RY16	RY17	RY18	RY19	RY20	RY21	RY22	RY23	RY24	RY25

³⁷ Due to final exit from Spark's SAP system in 2014, reassigning pre-2015 expenditure into our Chorus specific asset numbers and chart of accounts, etc. would be significantly challenging.







Consultation and independent verification

The Commission's proposed timetable imposes significant timing constraints on the development of the price-quality path proposal and the Commission's scrutiny of it. In addition, this will be the first time we will have had to prepare a proposal of this type. As a result, we favour: (a) deferring customer consultation to RP2, (b) agreeing terms of reference for a voluntary verifier process, and (c) permitting a high degree of flexibility in the form and contents of our first price-quality path proposal.

Totex approach

We don't support the introduction of a totex approach to setting expenditure allowances, because we are unlikely to face significant capex-opex trade-offs which the totex regime was designed to neutralise, and the risk of regulatory error if applied to our new network is insufficiently understood.

For more information, refer to section Issue 10: Input methodologies that support the setting of price-quality paths.

Q28 Do you have any views on additional incentive mechanisms (such as IRIS) that would be beneficial to consider including? (Note that the scope to include any additional mechanisms may be limited, given the time constraints we are under.)

Development of incentive mechanisms should be deferred for further consideration in anticipation of RP2 because:

- Design and implementation of incentive mechanisms will be a significant workstream:
- They are not essential to the implementation of PQR for RP1, as demonstrated by later application of incentives in Part 4 (e.g. EDBs);
- An incentive regime is unlikely to be a material driver of our behaviour in the short (three year) RP1 period; and
- Our network is still in the build phase and has not yet transitioned to operate and maintain. There is significant risk of forecasting variance. So deferral to RP2 will provide time for better baselining of our forecasting.

For more information, refer to section Issue 10: Input methodologies that support the setting of price-quality paths.

Q29 For any additional input methodology-related issues you wish to raise, please explain:

Q29a the nature of the issue;

Q29b the likely significance of the issue, when it will be likely to arise in practice, and whom would it affect;

Q29c what further information or analysis would be required to understand the issue; and

Q29d what potential solutions can be identified to resolve the issue?

We have no further matters to raise at this time.