Submission in response to the Commerce Commission's Further consultation on issues relating to determining a price for Chorus' UCLL and UBA services under the final pricing principle

 Consultation Paper (14 March 2014) and Supplementary Paper (25 March 2014)



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Executive Summary



EXECUTIVE SUMMARY

- This submission responds to the Commerce Commission's (Commission) Further Consultation Paper released on 14 March 2014 and Supplementary Consultation Paper released on 25 March 2014 (together, the Consultation Papers).
- In the Consultation Papers, the Commission seeks submissions on a number of issues:
 - 2.1 What service is being modelled? We say it is the service in each of the UCLL, SLU and UBA Standard Terms Determinations (**STD**);
 - 2.2 What is the modern equivalent asset (**MEA**)? We say copper is the MEA for UCLL and SLU, and an MEA that utilises Chorus' copper network inputs should be used to model UBA. If the Commission selects a fibre MEA, it is unlikely to be the most efficient MEA;
 - 2.3 How should relativity be applied? We say the Commission must set separate UCLL and SLU prices (but the TSLRIC prices are likely to be similar) and that the UBA price should be averaged as it is today. The Commission should then consider whether the relativity supports efficient investment and then factor the impact of that into its modelling;
 - 2.4 What confidentiality framework should apply? We say the Commission should implement a simple process that protects commercially sensitive information and maintains network security while allowing appropriate access for consultation;
 - 2.5 How should backdating be applied? We say that the Court of Appeal has said that backdating is required, but that the Commission can apply mechanisms such as smoothing to implement backdating.
- The Consultation Papers annexed advice from the Commission's legal advisor on these issues (but with the note that the advice does not represent Commission views). We have also provided comment on the issues raised by Dr Every-Palmer in his advice (while noting that the advice does not cover all relevant issues), and attach advice from Jack Hodder QC of Chapman Tripp.
- We welcome the Commission's intention to complete the final pricing principle (**FPP**) reviews in parallel and by 30 November 2014. The industry is aligned on the need for the processes to run in parallel and for the need for market certainty. The Commission's proposal helps achieve both of those objectives.
- Determining the TSLRIC price for the UCLL, SLU and UBA service is a vastly different exercise to benchmarking (which relies on the selection of international benchmarks for similar services). The benchmarking process was recently described by the High Court as a "quick and cheap" methodology. Based on comments by the Commission during the benchmarking process, benchmarking is a notably challenging methodology. Despite industry rhetoric, there are no grounds therefore for assuming that the benchmarked prices will hold during the more sophisticated TSLRIC process.



The practical issues with benchmarking, the changing views on the likely outcome of benchmarking¹, the differing views on the operation and design of section 18, the entry level fibre price relativity and the \$1b funding gap created by the benchmarked price should all be strong caution to any assumption that the benchmarked price is a constraint on the FPP pricing outcomes.

What is the service being modelled?

- The Commission has received FPP applications to set the TSLRIC price of UCLL, SLU, UBA and the associated connection charges. The Commission is tasked with setting prices for each of these services. The Commission has not yet commented on the inclusion of SLU, and we seek confirmation that the price of SLU will also be determined as part of this process.
- 8 Consistent with the rest of the industry, Chorus has recommended that the Commission model the full copper network. This would allow the Commission to determine prices for each of these services, including SLU, to be modelled contemporaneously.
- The Commission has asked what services should be modelled in determining these prices. Our view is that the Commission is required by the Telecommunications Act 2001 (**Act**) to replicate the functionality of the service and cost the service in the Standard Terms Determination (**STD**) to which the price review determination relates. This would be consistent with section 42 of the Act and the approach the Commission took in the initial price review (**IPP**) process, where it identified international services that were similar to the service defined in Schedule 1 of the relevant STD (noting that benchmarking is a less sophisticated process with significant constraints) and also noted:

TSLRIC models produce the expected costs that would be incurred by an efficient operator providing the regulated service in the form described in the applicable standard terms determination.²

- This also makes practical sense Chorus is required by the Act to provide certain services under the STDs and the pricing should provide efficient compensation for supplying those services. It is also consistent with the way the Commission has implemented the framework in the Act through the STD services since 2006.
- The TSLRIC definition in the Act then requires the Commission to determine the forward looking costs of the "facilities and functions that are directly attributable to, or reasonably identifiable as incremental" to the STD service. This is the full facilities and functions, and not a subset of them. Concepts like core functionality do not appear in the Act and cannot be read in.

¹ As noted in previous submissions, Telecom expected the additional costs of UBA to be between \$17-\$21 (over and above the UCLL price). Before demerger, Vodafone was concerned that the UBA price would increase once the cost of the cabinetisation investment had been accounted for (a concern also raised by Telecom prior to demerger).

² Decision [2013] NZCC 20, paragraph 45



- The Commission should take care not to confuse the first step in the Act (identifying the service to be modelled) with the second step (calculating the TSLRIC price of the service). Questions around the MEA and network optimisation are (and can be) addressed at the second step, even if the Commission is required to model the service defined in the STD. For example, under a scorched node approach, the Commission can still identify the most efficient path between the node and customer premises.
- This would also be consistent with past practice in other jurisdictions, such as Australia, the United States and a number of European jurisdictions, where the starting point has been an objective of costing the regulated service, and the changes in technology and network design in the model have been incremental rather than sweeping.

What is the MEA?

The Commission should model a copper network to estimate the TSLRIC of the UCLL STD service and SLU STD service and an MEA that utilises Chorus' copper network inputs to estimate the TSLRIC of the UBA STD service.

UCLL and SLU MEA

- The Commission is regulating today's nationwide services that it has determined in STDs (and not new fibre to the home services). A fibre MEA cannot replicate the functionality of the UCLL or SLU STD services without fixes that add significant cost. Chorus' access network is designed to meet detailed TSO requirements, and any hypothetical new entrant would be required to meet those same requirements. And the practical reality is that services that rely on the existing UCLL and SLU services, such as EFTPOS terminals, medical alarms, and security alarms, are still widely used.
- In the absence of the right incentives for copper to fibre migration, the potential impact of not having the UCLL and SLU functionality is evidenced by the fact that Chorus receives requests to provision copper to new apartments and subdivisions and maintains copper, even when fibre is available. This is because there are still hundreds of thousands of consumers and businesses who rely on copper for modems, alarms, SKY set-top boxes and the ability to communicate during a power outage (amongst other things). While these things may be able to be delivered over fibre in future, there is cost associated with enabling this.
- 17 Internationally, there has only been one fibre MEA TSLRIC model completed for UCLL. That means that there is essentially little developed precedent for a fibre MEA and there is much greater precedent available for a copper MEA making a copper MEA easier, less contentious and less time consuming. The European Commission in fact recommended that regulators should replace fibre assets with "efficiently priced copper elements" when determining access prices for services that are entirely based on copper. This is not the time for New Zealand to break new ground.
- There has also been comment about the fact that a fibre MEA could require a performance adjustment. No one in the world has done this. Any adjustment would need to be cost-based, which means the Commission would need to model the copper network in order to identify any adjustment. And it is not clear that even this is consistent with a TSLRIC approach, an issue that Switzerland has had to address through legislative change.



19 For completeness we note that neither GPON nor fixed wireless access is capable of providing an unbundled layer 1 service with dedicated connectivity equivalent to UCLL or SLU. Analysys Mason has already advised that P2P would be the closest (but would require fixes) and is not the lowest cost approach applying MEA principles.

UBA MEA

- The Act requires the Commission to identify the TSLRIC of the additional costs of providing the UBA STD service. The starting point for this assessment is to assume Chorus' existing copper layer one access services, and ask what additional costs are required to provide the UBA STD service. Chorus agrees with the Commission's preliminary views, and the preliminary advice the Commission is receiving, on this point.
- From a practical perspective, Chorus has been required to design its network and services in a way that allows Retail Service Providers (**RSPs**) to take UCLL and SLU and build a UBA service in the same way that Chorus does (equivalence of inputs). The fact that RSPs have not unbundled in all areas does not change the fact that a hypothetical new entrant would use UCLL and SLU to deliver UBA and would have the same equivalence of inputs obligations.
- In practice, this means that the Commission needs to capture the additional costs over and above the SLU and UCLL services that are required to deliver a UBA service, including:
 - 22.1 The fibre feeder and trenching (SLU backhaul);
 - 22.2 SLU and UCLL Co-location and power;
 - 22.3 Electronics, including DSLAMs and the first data switch;
 - 22.4 Backhaul from the first data switch to the exchange; and
 - 22.5 Non-network costs including operational and support systems.
- While there has been some early debate about where the fibre feeder costs are captured, based on the way an RSP would purchase services, it is most logical (and consistent with the existing STD structure and Schedule 1 of the Act) for the cost to be captured in the additional costs of providing the UBA service.

The STD structure

- 24 The Commission's advisor has touched on some of the issues regarding the interplay between the Act and the STDs. The current approach has been implemented by the Commission in search of coherency. We agree with Dr Every-Palmer on the importance of coherency of outcomes while noting that the framework requires the Commission in its processes, and in the case of section 42 processes, to price service-by-service.
- While the current framework and interplay between the Act and STDs established by the Commission presents challenges, the focus of the processes on foot is price only under section 42. We appreciate some of Dr Every-Palmer's thoughts and note that Chorus



raised these issues during the benchmarking process. The Commission chose not to address the framework issues relating to the interplay of the Act and STDs using the tools in the Act at that time.

- We would be concerned if these reflections on the framework now opened new processes that could impact the timelines for completing the FPP reviews for the services that are underway. In this submission, we have primarily focused on the section 42 task before the Commission, and would need to understand any other Commission proposals more fully to provide more meaningful comment. The proposal, supported by industry, of the Commission modelling the full copper network, will assist with coherency by ensuring that all costs are captured and recovered and the price reviews are on track for completion by 1 December.
- 27 Some parties have suggested that the Commission should determine the MEA using a competition based approach i.e. how would someone seeking to compete with Chorus build a network today. This is the wrong starting point for an MEA.
- A hypothetical new entrant is assumed to be taking the place of Chorus, and meeting the requirements that Chorus faces. This includes things like the current STD structure and requirements, network build restrictions, network design and configuration choices driven by regulatory requirements.

How should relativity and section 18 be applied?

- When considering relativity, the first question is what is the relativity between?
- The Commission is required to determine a separate TSLRIC price for each of the UCLL and SLU STD services. However, based on the key cost drivers (e.g., average trench length per customer), our current expectation is that the TSLRIC of the SLU STD service will be around the same level or higher than the TSLRIC of the UCLL STD service.
- For the UBA service, the Commission is required to calculate the additional cost of providing the UBA service. This is the additional cost over and above the unbundled copper local loop network which comprises the existing unbundled copper local loop network services SLU and UCLL STD services. The UBA service is nationally averaged today and should remain so.
- Relativity is an additional matter and requires due consideration.
- If UCLL and SLU prices were the same, and there was an averaged UBA price, the relativity consideration is between these two layers of price points.
- 34 If the UCLL and SLU prices differ (as under the benchmarked approach) and UBA is averaged as today then the relativity consideration raises further complexity. Put simply, there is a different differential/uplift between SLU and UBA as compared to UCLL and UBA. That in itself is a clear flag that the Commission must think about this much more deeply and more carefully. For pragmatic reasons, given the limits in the benchmarking processes, the Commission only turned its mind to UCLL and UBA relativity.



- The Commission has said that it needs to consider "efficient investment". In this case, the Commission needs to ask:
 - 35.1 Whether the relativity is sufficient to allow efficient investment taking account of density considerations and having regard to relevant matters to form that view. Recently expressed views from some of the industry that "the ladder of investment is dead" may be a relevant consideration in deciding what efficient investment means;
 - 35.2 If the relativity is not sufficient to allow efficient investment, then the Commission will need to take account of this in its modelling.
- These issues are not new but have never been well addressed in a benchmarking framework. When the STDs were established the Commission chose to de-average across urban, rural, cabinetised and non-cabinetised lines. A small amount of unbundling (around 7% of lines in New Zealand) has occurred in urban UCLL areas. No SLU unbundling has occurred (consistent with international experience). The unbundling that has occurred seems to be mostly about achieving lower cost inputs in a few places, rather than really climbing the ladder. Substantial scepticism exists on the evidence and theory for the ladder of investment and this is exacerbated when there are investment choices as between copper and fibre as well.
- 37 References are often made to regulated prices being a ceiling. However, it is possible that the Commission's application of relativity means it is creating a floor for UBA depending on how it is forming a view on the line between efficient and inefficient investment.
- 38 Dr Every-Palmer says that there is a statutory intent that supports the ladder of investment theory. At the same time, the relativities between copper and fibre prices will heavily influence any migration and therefore what services are offered in the market. We agree.
- 39 If the Commission does not think that section 18, including 18(2A), provides a sign post on how to resolve those two competing tensions, then it is tasked with major policy decisions on the ladder of investment and the transition to fibre.
- Decision making will affect and influence investment, choices and outcomes. There is no framework guidance in place that guides how the Commission will approach such matters and what outcomes it is seeking to achieve in making any such judgments. It is for these reasons that we have been seeking a meaningful way to engage in how the Commission might approach these matters.
- 41 Pricing regulation cannot be predictable in any sense with these major issues evolving opaquely within statutory processes.

Confidentiality

There are a number of reasons to implement a confidentiality framework, including protecting information for network security reasons and to manage access to commercially sensitive information that would benefit a competitor. We propose a



- confidentiality framework that is simple and allows external economic experts access to confidential information.
- Providing wider access will not achieve predictability, as it is the Commission's view on the modelling approach and section 18 and the outcome of the modelling, not the raw data that provides predictability.

Backdating

- Our advice is that backdating is required, based on the 2006 Court of Appeal decision. At the same time we recognise the significance and uncertainty arising from the fact that the FPP processes are likely to result in higher prices (as compared to benchmarking) and a rebalancing. There is precedent from the electricity industry (e.g. Transpower) for managing the impact of backdating, such as smoothing of the backdated amount across future prices. These options are open to the industry and the Commission to manage any potential business impacts of backdating.
- We would be very happy to discuss potential approaches with the Commission and our customers when the process permits. Given the Commission's intention to complete both the UCLL/SLU and UBA processes in parallel by 1 December, backdating risks are present but reduced. Business decisions, including provisions, will have to be made by all businesses as they assess appropriate with the knowledge they have.

Submission



THE LEGAL FRAMEWORK FOR PRICE REVIEW

- The Commission has sought views on a number of issues in the Consultation Papers, and provided preliminary advice on the legal framework from Dr James Every-Palmer (noting that this advice does not represent the Commission's view).
- Chorus has asked Chapman Tripp to provide preliminary advice on the key features of the legal framework having considered Dr James Every-Palmer's advice, and that advice is attached to this submission.

The services subject to price review determinations

- The Commission has received FPP applications to set the TSLRIC price of UCLL, SLU, UBA and the associated connection charges. The service descriptions, non-price terms, operations manual, charges and prices are set out in the STDs. The Commission is tasked with setting prices (only) for each of these services through these processes.
- To date, the Commission has not made reference to its intention to determine the SLU price or connection charges. The Commission's 30R review of the UCLL price determined the price for both UCLL and SLU, including connection charges (see for example Attachment E of Decision NZCC 37/2012). A number of parties sought review of both prices in their FPP applications. For example:
 - 49.1 At paragraph 6 of Chorus' FPP application dated 5 February 2013, we said "The specific prices for which a review is sought are those listed in Appendix (sic) E of Decision NZCC 37/2012"; and
 - 49.2 At paragraph 2 of CallPlus' FPP application dated 5 February 2013, CallPlus explicitly lists the SLU price (sub paragraph (c)) and connection and transfer fees (sub paragraph (d)).
- The Commission is therefore required to set the price of UCLL, SLU, UBA and the associated connection charges.
- In relation to the general framework for applying the FPP and making a price review determination (**PRD**), Chapman Tripp advises the following propositions are important:
 - 51.1 The structure and logic of the two-stage price determination process (using "initial" and "final" principles) provides a statutory assumption that the PRD (using the FPP) will produce a more accurately efficient price for supply of the service regulated under the relevant STD.
 - 51.2 A PRD necessarily relates to the service which is the subject of the STD, which itself may be narrower than the full Schedule 1 (Part 2, Subpart 1) service description, and must follow its own process (that is, it cannot be dealt with jointly with another PRD for a separate service).



- 51.3 While the STD service description may be amended under other provisions in the Act (if invoked)³, that requires compliance with a meaningful procedure prescribed by the Act, and is irrelevant until and unless a new service description is in place.
- This means that the Commission must carry out a separate TSRLIC process for each of the UCLL, SLU and UBA PRDs, which is consistent with Dr Every-Palmer's advice (at paras 32 to 34).

The "service" to be priced

- Our view is that the "service" to be priced is the service in Schedule 1 of the relevant STD. The Commission is tasked with setting the price for "the service".
- The applications for review of the UCLL, SLU and UBA prices were made under section 42(1) of the Act, which provides that where a determination is made "regarding the price of a designated access service, a party to the determination may apply for a review of that part of **the determination** that relates to the price paid for **the service**". It follows that the Commission is required to set a price for the service in the determination which in each case was a determination of the price of the STD service carried out under section 30R of the Act.
- This would be consistent with the approach the Commission took in the initial price review (**IPP**) process, where it identified international services that were similar to the service defined in Schedule 1 of the relevant STD. In relation to the FPP process, the Commission noted in the UBA benchmarking determination that:

TSLRIC models produce the expected costs that would be incurred by an efficient operator providing the regulated service in the form described in the applicable standard terms determination.⁴

56 Chapman Tripp advises:

- 56.1 The TSLRIC FPP is defined in Schedule 1 (Part 1, Subpart 1) of the Act in terms of "forward-looking costs", and plainly contemplates and permits analysis of technologies other than those actually deployed by the current access provider, **but** the definition and concept of TSLRIC cannot dictate the description or scope of the "service" to which the determination will apply.
- 56.2 The Act reflects a legislative intent or expectation that, at the time of a PRD, RSPs would already be using the service provided, and would have reflected and relied on aspects of the functionality of that service in their own (retail) services.
- 56.3 Conversely, while there may well be some "abstraction" of service functionality involved in a TSLRIC analysis, it cannot have been a legislative intent that the service to be the subject of the PRD exercise would be one which (in the

³ For example section 30R reviews of an STD or Schedule 3 investigations to change Schedule 1. The legislation does not permit changes the UBA STD specification (excluding price) until 1 December 2014.

⁴ Decision [2013] NZCC 20, paragraph 45



relevant hypothesis) was inconsistent with, or assumed away, the current functionality which enables RSPs to continue their existing range of retail services.

- The provisions of the Act relating to the TSO (in Part 3) are directed to quite different concepts than Part 2, and have no direct relevance to the PRD analyses. However, as an indirect matter of relevance, it would be inconsistent with an overall legislative intent or expectation if the PRD analysis involved assumptions about technology which were inconsistent with, or assumed away, the ability of service providers to comply with the TSO.
- The PRD exercise is about identifying an assumed more efficient price for the (already defined) "service", using TSLRIC. It does *not* involve the use of TSLRIC to redefine that service. As Chapman Tripp advises:

the access provider cannot be penalised by a TSLRIC analysis which fails to "compare apples with apples" – that is, which does not reflect the range of the "service" which is defined and required to be provided.

The MEA

Based on the definition of TSLRIC, the MEA must be capable of delivering the full functionality of the STD service:

TSLRIC:

- (a) means the forward-looking costs over the long run of the total quantity of **the facilities and functions that are directly attributable to, or reasonably identifiable as incremental to, the service**, taking into account the service provider's provision of other telecommunications services" and
- (b) includes a reasonable allocation of forward-looking common costs (emphasis added)
- The Act does not narrow this definition to only "core functions" (a term that seems to require interpretation in itself). And in contrast to the IPP, the Act does not require that the Commission only consider "similar" services (an appropriate standard in the less sophisticated IPP process). Nor does the FPP process allow the Commission to redefine the STD service the Commission is tasked with only determining the price of the service that was subject to the original section 30R review.
- Or Every-Palmer identifies that it may be useful in determining the "core functionality of the relevant services" for the Commission to "have regard to the current services offered and the features that are most desired by customers."⁵
- As the attached advice from Chapman Tripp explains, the Commission is not tasked with identifying the "core" functionality. All functions of the relevant STD service must be capable of being delivered by the Commission's modelled operator. The Commission

⁵ Dr James Every-Palmer, FPP Issues Paper at [41].



does not have the discretion to model a service that only has some of the functions of the relevant service.

The Commission's task is to determine the TSLRIC price of the service. The MEA is a tool used in determining the TSLRIC price. But the MEA concept does not allow the Commission to depart from the functionality of the STD service. This is consistent with Ofcom's definition of the MEA:

...the concept of forward-looking costs requires that assets be valued using the cost of replacement with the modern equivalent asset. The MEA is the lowest cost asset which serves the same function as the asset being valued. 6

63 Similarly the International Regulators' Group notes that:

In practice, the concept of forward-looking costs requires that assets are valued using the cost of replacement with the modern equivalent asset (MEA). The MEA is the lowest cost asset, providing at least equivalent functionality and output as the asset being valued. The MEA will generally incorporate the latest available and proven technology, and will therefore be the asset that a new entrant might be expected to employ. ⁷

Another European regulator recently noted the need to emulate the existing asset:

In many cases new technologies may have been developed since the existing asset's installation. Provided the new technologies can perform the functions carried out by the existing asset (with the same quality), the modern equivalent asset (MEA) may be an asset that uses the new technology. This should be independent of whether or not the SMP operator has plans to replace the existing technology.

There are various definitions of the MEA. The MEA definition used here is that of an asset that can produce the stream of services produced by the existing asset at lowest cost.⁸

- Placing greater weight on the "modern" element of the MEA definition, at the expense of the "equivalent" element could result in the Commission using technologies that do not fit the conceptual mould of lowest cost.
- 66 Chapman Tripp advises:
 - 66.1 The required FPP analysis, being long term and not of the incumbent access provider's actual operations, permits and may require the use of available alternative technology (modern equivalent assets, or "MEA"). The MEA must,

⁶ http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/netcha97/chap3.htm

⁷ IRG, Principles of implementation and best practice regarding FL-LRIC cost modelling, 24 November 2000, http://www.irg.eu/streaming/78.pdf?contentId=543300&field=ATTACHED_FILE

⁸ DBA, Model Reference Paper: Final version, 18 September 2008, pp. 43-44



however, be capable of delivering the (already defined) facilities and functions of the "service";

- 66.2 The scope of the "service" to which a PRD relates is defined by reference to the service description in Schedule 1 of the Act and the STD in accordance with which the service is provided. The "service" cannot be redefined by a focus on a TSLRIC analysis utilising MEA if the hypothetical scenario involves a service which cannot provide the full functionality which access seekers currently require to provide their existing range of retail services which are (or could be expected to be) founded on the described access service; and
- 66.3 In the case of the UBA STD, the "additional costs" of the service required to be determined in accordance with TSLIRIC, are the costs additional to Chorus' copper local loop network. It follows that the MEA for the required FPP analysis for the UBA STD must be both capable of delivering the (already defined) facilities and functions of the service, but also capable of interconnection with Chorus' copper local loop network such that the "additional costs" of the service to, and provided over, that network may be identified.
- For this reason Chorus disagrees with this aspect of Dr Every-Palmer's preliminary. The Commission's model must replicate and cost the full STD service functionality.
- It is necessary to be cognisant of the actual service required to be delivered under the STD, not a hypothetical service. The TSO is relevant to this and market reality. We are not sure what Dr Every-Palmer intends by the TSO determining a "high-level" description of the functions provided by the local loop. This seems aligned with the Chorus view the TSO is not a regulatory constraint, but is an example of expected functionality.
- 69 We discuss the functionality of the STD services in the following sections.

Section 18

We agree with Dr Every-Palmer's statement that section 18 must be considered by the Commission where it exercises discretion:⁹

As you are aware, the Commission must exercise its discretion in the way that best "promote[s] competition in telecommunications markets for the long-term benefit of end-users of telecommunications services" (ss 18 and 19).

- However, the Commission must be mindful to start with the requirements of the statutory framework.
- 72 In relation to section 18, Dr Every-Palmer says there is an indicated statutory intent that supports the ladder of investment and setting prices that influence build and buy decisions.

⁹ James Every-Palmer, FPP Issues Paper at [21].



- A number of parties at a recent workshop urged Commission staff to consider the ladder of investment as "dead" when considering relativity and section 18. We have sympathy with this view from a policy perspective in today's environment.
- While a small amount of unbundling (around 7% of lines in New Zealand) has occurred in New Zealand in urban areas, no subloop unbundling has occurred (which is consistent with international experience). The unbundling that has occurred seems to be mostly about achieving lower cost inputs in a few places, rather than climbing the ladder. There is also substantial scepticism on the evidence and theory for the ladder of investment which is exacerbated when there are competing investment incentives between copper and fibre.
- 75 The Commission is aware that the market is heavily price focused and the relativities between the copper and fibre prices are a key influence on incentives for investment and migration, and therefore what services are offered to end-users.
- 76 These two issues the ladder of investment and incentives to invest in and migrate to fibre create a tension. If the Commission does not believe that section 18/18(2A) provides a signpost to resolve that tension, then the Commission is tasked with major policy decisions on the ladder of investment and transition between copper and fibre.
- 77 The Commission's decision making will affect and influence investment, choices and outcomes. There is not framework guidance that guides how the Commission approach such issues and what outcomes it is seeking to achieving in making any judgements. It is for these reasons that we are seeking a meaningful way to engage in how the Commission might approach these issues.
- The current price regulation is not stable or predictable, because the outcomes that the Commission is driving for are unclear determination-by-determination. So in response to recent questions by the Commission around whether outcomes are relevant, we think they are.
- We do not think it is unreasonable to request that the Commission, as the expert regulator that believes that that these choices are within its discretion, set out views in a way that can be responded to.



UCLL AND SLU MEA

- As explained in the previous section, the Commission must model the full functionality of the UCLL and SLU STD services. We have described the functionality of the UCLL and SLU STD services in previous submissions, and explained why an assessment of the full functionality and forward looking cost requirements means that the Commission should model a copper network for UCLL and SLU.¹⁰
- Modelling the STD service and using a copper MEA does not preclude optimisation, a concern raised by Dr Every-Palmer. A copper MEA would require effectively the same level of optimisation considerations as implied by a fibre MEA, implemented through optimising aspects such as:
 - 81.1 The distance between the node and the customer premises;
 - 81.2 Dimensioning of network segments;
 - 81.3 The degree of aerial deployment;
 - 81.4 Manhole spacing; and
 - 81.5 Assumption of modern trenching techniques rather than those used in the past for both copper and fibre.
- For each of these the Commission would have to make assumptions based on the best and most efficient modern practice, taking into account local conditions and constraints (such as the Resource Management Act, ability to secure commercial access to poles and the ability to install poles). In practice, we would expect that the cost of an optimised copper network would be not substantially dissimilar to those of an optimised fibre network, as other cost modellers in Europe have found.¹¹
- This view on optimisation is also consistent with the approach taken in Denmark:

The DBA interprets the Scorched Node constraint such that when modelling an "optimally structured network" under the scorched node assumption the locations for equipment are constrained by the existing number of sites and their existing locations. However, the scorched node assumption does not imply that the transport network – cables, duct/trench etc. – is fixed. Nor does the assumption imply that the same number and type of equipment should be placed at each of these geographical locations. 12

¹⁰ See Analysys Mason "Response to Commission" (12 February 2014) at page 14, and as described in Chorus "Submission in response to the Commerce Commission's Process and issues paper for determining a TSLRIC price for Chorus' unbundled copper local loop service in accordance with the Final Pricing Principle" (14 February 2014) at [43 - 48] (UCLL TSLRIC Submission).

 $^{^{11}}$ See for example TERA, Modification and development of the LRAIC model for fixed networks 2012-2014 in Denmark – MEA Assessment, May 2013, p20-21

¹² TERA, Modification and development of the LRAIC model for fixed networks 2012-2014 in Denmark – Draft Model Reference Paper, May 2013, p56.



- Despite our view on the appropriate MEA, we recognise that the Commission is considering other technologies for the MEA for UCLL and SLU. We think that the Commission will encounter additional and unique issues in seeking to use these alternative technologies of the MEA because:
 - 84.1 GPON and fixed wireless services cannot provide an unbundled layer 1 service with dedicated connectivity which is equivalent to UCLL or SLU. The Australian Competition Tribunal noted that:
 - "...the ULLS cannot be provided except through copper pairs. It is an intrinsic feature of the ULLS that access seekers physically interconnect with the copper pairs that provide access to customers' premises. The ULLS is not a service capable of being provided to end-users. It is an input to such a service. Access seekers could not interconnect with and purchase an unconditioned service in a fibre-based CAN."¹³
 - 84.2 There would need to be a significant number of "fixes" to any P2P fibre service modelled to ensure that it has the full functionality of the UCLL and SLU services. The practical reality is that many people rely on copper capability such as dial-up for things such as EFTPOS, alarms and Sky set top boxes, so the cost of this functionality needs to be built into any fibre model (this is consistent with the requirements of international regulators such as the Swedish Post & Telecom Authority (**PTS**)). This would be complex and time consuming;
 - 84.3 The suggestion that there may need to be a quality adjustment is completely untested internationally. There is a question as to whether a quality adjustment can be done under a TSLRIC approach. However, at a minimum, any adjustment would need to be cost based which would suggest that the Commission would need to build a copper MEA in parallel; and
 - 84.4 There has only been one country that has completed a fibre MEA for UCLL.
- In Sweden, PTS requires that the services modelled be equivalent from the perspective of both the end-user and the RSP, and requires the costs of technological fixes required to ensure equivalence are included in the model (consistent with Chorus' position):

12.3.2 Equivalence between services

Even if the services that are modelled in the bottom-up model can be of a quality level that corresponds to the level offered by the SMP operator there may still be differences between those levels. This is because the modelled network is not an exact copy of the network of the SMP operator. The modelling of a different network means that it is not always possible to reach full conformity between the costed services and the actual services offered by the SMP operator.

¹³ Application by Telstra Corporation Limited ABN 33 051 775 556 [2010] ACompT 1 (10 May 2010)

http://www.austlii.edu.au/au/cases/cth/ACompT/2010/1.html

¹⁴ Model Reference Document (MRP rev d) guidelines for the development of LRIC bottom-up and top-down models PTS, 17 April 2012, www.pts.se/upload/Remisser/2012/Telefoni/Utkast_MRD_20120417.pdf , s12.3.2



The modelled services should however, from the perspective of the end-user, be equivalent to the services offered by the SMP operator. No "external" costs should occur when a similar service is offered. This for example means that if fibre or radio are the MEA in the access network then the cost for the relevant CPEs (required to allow an end-user to use his analogue [PSTN] telephone) be included in the model.

For wholesale services, where the interconnecting operator is still expected to have to use another technology than NGN for interconnection traffic, the costs for relevant equipment, making it possible for the operator to interconnect via TDM, should be included. For wholesale services in the access network, like e.g. LLU, the corresponding service should mirror what a wholesale customer would wish to acquire. This e.g. means that, in those areas where LLUB is offered, the bottom-up model should model an access network that can be used to offer access to the access network. This can result in the exclusion of alternative technologies, such as PON, where effective access may not be possible (it could though become possible over WDM technology).¹⁵

These issues (which will drive unnecessary cost and complexity and could present risks to timetabling aims), point back to a conventional approach of a copper MEA for UCLL and SLU. This is the approach taken in Australia, the United States and a number of European jurisdictions (for example Belgium¹⁶, Germany, Italy, Slovenia and the Czech Republic).

Fibre network functionality

- In this section we explain the extra work that will be needed to attempt to use a fibre MEA to set prices for the UCLL and SLU STDs.
- The Commission is consulting on the use of fibre technology as an MEA when modelling the TSLRIC of the UCLL and SLU STD services. Two of the suggested fibre network solutions GPON and fixed wireless do not provide a layer one unbundled service with dedicated connectivity, and for that reason cannot be used to model the UCLL and SLU STD services.¹⁷ The remainder of our discussion below relates to the features of a fibre P2P network.
- If a fibre P2P network was modelled today, the modelling would need to include "fixes" that would provide for the large range and number of devices, services and markets that currently assume a copper network. Some of the functionality that these devices rely on are required by regulation (e.g. STD requirements and the TSO) which can also constrain Chorus' choice of technology in the absence of incentives to migrate to fibre. These same requirements would apply to any hypothetical new entrant building a UCLL and SLU service today.

¹⁵ Model Reference Document (MRP rev d) guidelines for the development of LRIC bottom-up and top-down models PTS, 17 April 2012, www.pts.se/upload/Remisser/2012/Telefoni/Utkast_MRD_20120417.pdf , s12.3.2

¹⁶ The Belgian regulator is currently engaged in modelling an operator that uses the existing network technology (FTTN). ¹⁶ IBPT, Projet de decision du Conseil de I'IBPT, 3rd July 2013, para 81.

 $^{^{17}}$ Chorus, UCLL TSLRIC Submission at page 21 and Analysys Mason "Response to Commission" (12 February 2014) at pages 23 to 26.



90 The practical reality is that:

- 90.1 The devices supporting these services and markets assume a connection to the network is provided by a copper pair, and terminates on an analogue telephony interface on the copper network which behaves as it has done for several decades. Using a fibre network, requires a change to packet-based transmission and a different network configuration;
- 90.2 While there are technologies which can be used in conjunction with a fibre connection to deliver services to the same technical standards as used in the copper network, this does not mean all existing devices will work with such fibre-based technology. The reason for this is that the copper network is very tolerant with how devices behave which has allowed services and markets to develop flexibly and cheaply;
- 90.3 These issues are widespread and significant. They affect hundreds of thousands of residential and business end-users, and in some cases entire markets and industries. To illustrate this, a TSLRIC model that assumes a change to a fibre P2P network, without "fixes", also assumes a New Zealand where monitored security and medical alarms, EFTPOS terminals, Sky set-top boxes, fax machines and modems may not work reliably, end-users who want voice-only services will require specialised equipment and there is no power back-up.
- 91 Until there are sufficient incentives for customers to migrate from copper to fibre, these issues remain. Chorus and its customers are grappling with these issues today during this transitional period between copper and fibre. Chorus still receives requests for copper networks in new subdivisions and new apartment developments that already have fibre. This is exacerbated by the fact that Telecom and some other RSPs cannot provide voice services over a fibre network, and the absence of the right incentives to facilitate copper to fibre migration.

Implications of functionality for modelling

- There are two ways to address the functionality shortfall of a P2P fibre network when modelling the TSLRIC price of the UCLL and SLU STD services:
 - 92.1 Model a copper network; or
 - 92.2 Use a fibre P2P MEA, and include in the TSLRIC model the cost of measures which enable fibre to provide the functionality of the UCLL service.
- On the first option, Analysys Mason advises that copper is the only technology that can deliver the full functionality of the UCLL and SLU STD service without additional fixes. Modelling copper would avoid additional and unnecessary complexity, and is a conventional approach. Australia, the United States and a number of European jurisdictions have used copper MEAs to determine a UCLL price.
- As around 80% of UCLL and SLU costs are in the civil components of the service, it is also likely that the cost and price for the services will be similar, irrespective of using a copper MEA over a fibre MEA.



- The second option is to use a fibre P2P MEA, and include in the TSLRIC model the cost of measures that enable fibre to provide the functionality of the UCLL service. This would involve identifying and costing not only technical "fixes" but also resolving a number of multi-party co-ordination issues. For example:
 - 95.1 The cost of installing Analogue Telephone Adaptors and batteries;
 - 95.2 The cost of replacing or resolving configuration issues with DSL modems, SKY set-top boxes, security alarms, medical alarms, EFTPOS terminals, dial-up modems, fax machines; and
 - 95.3 Fibre can only offer voice-only connections over a broadband or narrowband connection. In order to maintain their voice-only end-users' services, the model would need to account for the added components of a fibre transmission system. New equipment would be required at the end-user's premises and the RSP would require a voice services network.
- As noted in our previous submission, evidence of the impacts and importance of keeping the existing CPE and of the DC power path is available from the Telecom technology trial (PSTN to VoIP Migration) of December 2010 to February 2011. Some of the key findings from the related industry consultation were:
 - 96.1 Significant potential industry impact affecting up to 500,000 sky units and up to 300,000 monitored alarms (using dial-up modems);
 - 96.2 Discussion on the management & overhead of batteries, highlighting some potentially major operational implications, e.g.: battery swap out every 5 years;
 - 96.3 Some alarms require/expect power down the cable;
 - 96.4 Civil Defence expect PSTN to be working after other services drop out first e.g. power, cellular, RF";
 - 96.5 Not all the codec's used in VoIP services available today support Alarms, Sky etc. "The customer isn't told except in fine print of T&C's & they don't understand the ramifications";
 - 96.6 There are significant cost & time implications to aligned industries and customers with any upgrade to a VoIP/IP only environment.¹⁹
- Once the costs of implementing corrective measures are factored into the assessment of fibre P2P MEA options, fibre P2P MEAs are likely to be more expensive than a copper

¹⁸ Analysys Mason "Response to Commission" (12 February 2014) at page 23.

¹⁹ Telecom "Low Speed Modem Trial – Initial Results Communication (24 February 2011), accessible at: http://www.med.govt.nz/sectors-industries/technology-communication/pdf-docs-library/communications/telecom-separation/variations-4-subsections/v4-pstn-consult-appendix-v-trial-results.pdf/view



MEA. As noted by Analysys Mason, regarding FTTH P2P (which Analysys Mason determines to be the closest fibre MEA to the functionality of the UCLL STD service):²⁰

...Once we consider the additional costs that an FTTH-P2P network would have to bear to provide a service comparable to the existing UCLL (specifically, battery back-up for every end user, ATA for voice users, and additional broadband modems – both to replace DSL modems and for voice-only users to allow the use of voice over broadband (VoBB)), it is very likely in our view that copper remains the MEA for UCLL.

Other matters to be addressed with a fibre MEA

- 98 The Commission has proposed that an adjustment would need to be made if fibre was modelled. While there has been no substantive engagement on how this might be done, there is a question as to whether an adjustment is consistent with the requirement in the Act to set a TSLRIC price.
- 99 No regulator in the world has yet set an access network unbundling price based on such a method. In Switzerland, where it has been considered, it has been necessary to first change the legal framework the "Telecommunications Ordinance" to make specific provision for such an adjustment. The pre-existing legislation, which called for a forward looking cost-based pricing methodology was clearly deemed not to allow for a performance adjustment. This Ordinance has been amended but is not yet in force (it will come into force on 1 July 2014).
- 100 As stated in the Analysys Mason paper:²¹

In our view [performance adjustments] are not consistent with the requirement of the Act for a TSLRIC approach to FPP. The performance adjustment approach does not provide correct incentives for investment by Chorus (or a hypothetical new entrant) as it does not lead to expected NPV neutrality (due to the cap of the copper price at LRIC+ if willingness to pay is low), and the willingness to pay "Delta" is likely to vary over time and be small. It is inconsistent with the existence of the LFCs selling services at negotiated prices. Finally, it is also more costly to undertake.

101 If, despite this, the Commission believes that it can make a performance adjustment to a fibre-based TSLRIC price for UCLL and SLU, this adjustment would at least need to be cost-based. This implies that the Commission would need to model both a copper and fibre MEA in order to make an assessment of any appropriate cost-based assessment (this is the approach taken in Denmark, for example). As we note above, as around 80% of the UCLL and SLU costs are civil costs, a copper and fibre MEA are likely to result in similar costs and prices – the latter modelling route however carries much more complexity and risk that will need to be consulted upon.

Further international context

There has only been one country that has completed a fibre MEA to determine a UCLL price. This means that the Commission would be taking a new and relatively untested

²⁰ Analysys Mason "Response to Commission" (12 February 2014) at page 28.

²¹ Analysys Mason "Response to Commission" (12 February 2014) at page 29.



approach to modelling UCLL in New Zealand. This is not the time for breaking new ground. It will be considerably harder, more contentious and time consuming in the absence of a set of well-defined choices and a body of knowledge that can provide some information around how to design and model the network while recognising the need to consider the New Zealand environment and framework.

- 103 Whilst LFCs are deploying fibre currently, this does not make the Commission's job easier. LFCs are building in urban areas only (Chorus' network is national), are deploying GPON (which is not an equivalent technology to UCLL) and (being power companies and/or part of a local authority) are entities with quite different characteristics and drivers compared to a typical telecoms operator.
- 104 The Commission's Consultation Paper refers to the European Commission's recommendation to model a single efficient next generation access network as a useful starting point for a price set under UCLL.²² This leads the Commission to suggest a novel approach to pricing UCLL:
 - 104.1 Place greater weight on 'modern' (at the expense of 'equivalence');²³
 - 104.2 Model technologies that are 'different and superior" to the service described in the relevant STDs by use fibre and Fixed Wireless Access networks as the MEA; 24 and
 - 104.3 To then make adjustments to the costs derived from this approach for "observed performance differences".²⁵
- The European Commission Recommendation, however, is not designed to identify the forward-looking TSLRIC of the copper networks in Member States. The objective is "to improve the regulatory conditions needed to promote effective competition, enhance the single market for electronic communication networks and services, and foster investments in next-generation access (NGA) networks". It is concerned with calculating the cost of deploying a "modern efficient NGA network" which it defines as consisting "wholly or partly of optical elements, depending on national circumstances, and should be capable of delivering the targets of the Digital Agenda for Europe set out in terms of bandwidth, coverage and take-up". 28
- Most importantly, in relation to the existing copper network, the Recommendation is not to take the cost of NGA and adjust for performance, but to model the copper network:

ibid, para 79

²³ ibid, para 101.1

²⁴ ibid, para 118

ibid, para 118

²⁶ EG Recommendation of 11.9.2013, Recommendation 1

ibid, para 32

ibid, para 32



When determining the access price of services that are entirely based on copper, NRAs should adjust the cost calculated for the modelled NGA network to reflect the different features of wholesale access services that are based entirely on copper. For this purpose, the NRAs should estimate the cost difference between an access product based on for example FttC/FttH and an access product based entirely on copper by replacing the optical elements with efficiently priced copper elements, where appropriate, in the NGA engineering model". ²⁹

- 107 This is the approach that has been adopted in Denmark
- This statement recognises that the equivalent of assets in a copper network are copper, not fibre, assets. Even so, the European Regulators group (BEREC) had been critical of this element of the draft recommendation, saying "instead of 'reverse engineering' the copper network costs from an FTTC architecture, BEREC thinks it would be much more appropriate (and accurate) to calculate these costs directly using a copper model".³⁰
- To the extent therefore that the European Commission recommendation can be said to be a useful starting point for a price set under UCLL it is that the MEA when pricing a copper network (that is, a network to deliver the services defined in the UCLL and UBA STDs) is "efficient priced copper elements".
- 110 As we have noted earlier in this submission, there is substantial international precedent for a copper MEA for UCLL. In fact the Belgian regulator is currently engaged in modelling an operator which uses the existing network technology (FTTN).

ibid, para 37

BEREC Opinion, 26 March 2013, para 135



THE UBA MEA

111 The Commission is required to model the forward-looking TSLRIC of the additional costs in providing the UBA STD service. In order to meet the forward-looking requirement, the Commission must model the MEA of the UBA STD service. This is then added to a base price to determine the UBA price.

The UBA service

The additional costs

112 As set out in our UBA TSLRIC Submission, the Commission must model the additional costs of supplying the UBA STD service.³¹ This would be consistent with the UBA IPP determination, where the Commission was explicit that it benchmarked the STD service:

We are benchmarking against the costs of an efficient operator providing the service as specified in the $STD.^{32}$

- The "additional costs" of providing the UBA service are capital and operational costs including:
 - 113.1 the costs of switches and handover equipment at the first data switch;
 - 113.2 the cost of backhaul from the first data switch to the exchange (including the cost of trenching, duct and cable);
 - 113.3 on non-cabinetised lines, the cost of the DSLAM equipment and exchange space and related costs including resilient power;
 - 113.4 on cabinetised lines, the cost of fibre backhaul from exchange to cabinet (including the cost of trenching, duct and cable), cabinet space and related costs including resilient power, and the cost of the DSLAM equipment; and
 - 113.5 relevant non-network costs including operational and support systems.
- To date, the Commission has not yet sought views on how or where each of the additional costs, such as the fibre feeder, are captured. The Commission cannot (as some parties have suggested) simply ignore some of these costs.

The base price

115 As well as the additional costs, the Commission must determine a price for "Chorus' unbundled copper local loop network" (the base price). The term "unbundled copper local loop network" is not defined in the Act. However, Schedule 1 of the Act does define "local loop network: as:

That part of Chorus's copper network that connects the end-user's building (or, where relevant, the building's distribution frame) to the handover point in Chorus's local telephone exchange

³¹ Chorus, UBA TSLRIC Submission at [3 - 7].

 $^{^{32}}$ Decision [2013] NZCC 20, paragraph 152



(including where it passes through a distribution cabinet) or distribution cabinet (or equivalent facility).

116 For pragmatic reasons, the base price used in the benchmarking process was UCLL. This will need to be assessed and discussed further in the TSLRIC environment. The Commission's external advisor is naturally raising the complexity of the interplay between the Act and the STD and the reality of cabinetised and non-cabinetised lines and services which are both used for the UBA service. This is interconnected with the relativity and coherency considerations discussed in this submission.

Chorus' copper local loop network is a given

- 117 The starting point in selecting the MEA for UBA is that the Commission must take Chorus' existing layer 1 copper local loop network as a given. A hypothetical new entrant supplying the UBA service would purchase Chorus' UCLL and SLU services as inputs to its UBA service, rather than building its own layer 1 network.³³
- 118 The Commission supports this starting point: 34

In our view, in considering the relevant MEA for UBA on its own, a hypothetical new entrant seeking to compete with Chorus' UBA service would utilise the existing layer 1 inputs that are currently available. This results in a practical constraint on the UBA MEA, and the degree of network optimisation possible.³⁵

Accordingly, our current thinking is that the UBA MEA will utilise Chorus' copper based inputs potentially with rural broadband initiative (RBI) fixed wireless in place of copper in some rural areas.

- 119 The Commission must model and price a network that can *deliver* the service as defined in the STD. For the reasons explained earlier in this submission, the Commission's model must replicate and cost the full STD service functionality. The focus on the HNE "competing" with Chorus' UBA service does not seem to fit within this framework and needs further consideration by the Commission.
- 120 We also note that the Commission's starting point i.e. Chorus' local loop network is the right starting point irrespective of whether RSPs are using that network to compete with UBA today. This is what a hypothetical new entrant would do, and it is how Chorus provides its UBA service today (with its equivalence of inputs obligations).

An MEA that utilises Chorus copper network inputs for UBA

Given the copper local loop network is the starting point, the MEA for UBA must utilise Chorus' copper network inputs. Current DSL technology is modern and the lowest cost technology for providing bitstream services over copper.

³³ See paragraph 21 of Chorus' 21 February 2014 submission on the Commission's UBA TSLRIC Process and Issues Paper for more detail

³⁴ Commerce Commission "Process and issues paper: Determining a TSLRIC price for Chorus' unbundled bitstream access service under the final pricing principle" (7 February 2014) at [16 - 17].

³⁵ Telecommunications act 2001, Schedule 1, Part 1, section 1.



122 Utilising Chorus' copper network inputs also avoids creating a competitive distortion, as discussed in our UBA TSLRIC Cross-submission:³⁶

...assuming the existing copper network inputs and modelling a UBA MEA capable of operating with those copper network inputs avoids introducing a competitive distortion between retail service providers (RSPs). Some RSPs will buy the existing copper network inputs and invest in their own capability to deliver UBA services, and other RSPs will buy the UBA STD service from Chorus at the price set by the Commission.

- For these reasons a DSL MEA gives best effect to the additional section 18 consideration of relativity, which requires that the ladder of investment and appropriate incentives to unbundle be considered.
- 124 We therefore agree with Dr Every-Palmer when he recognises the potential serious implications of becoming too hypothetical, any temptation to build super-efficient approaches that would never occur in the real world, and not staying grounded in the objective to price the service in the STD and provided in the market. He says:³⁷

There is some merit in the argument that this approach is required by the UBA FPP. For example, suppose that a fibre-to-the-home (FTTH) MEA is used in place of the current local loop for the purposes of determining the UBA FPP price. As I understand it, this may imply negligible additional costs for UBA. As well as tending to make unbundling uneconomic **this may prevent**Chorus from earning a reasonable return on its UBA assets even if it was providing a highly efficient service on the current network. [emphasis added]

125 Dr Every-Palmer explains that the requirement to ensure that the TSLRIC prices allow the access provider to recover common costs is more likely to be met if the Commission models a single MEA:³⁸

While I do not consider that this [recovery of common costs requirement] by itself requires the Commission to adopt a single MEA across all services, meeting these criteria is likely to be more complex if different MEAs are used for different services.

126 Chorus agrees with this warning and recommends adopting a copper MEA for modelling the UCLL and SLU services and an MEA that utilises Chorus' copper network inputs for modelling the UBA service.

RBI fixed wireless is not an appropriate MEA

127 The Commission and Dr Every-Palmer both discuss the possibility of allowing for utilisation of RBI fixed wireless in place of copper in some rural areas. We do not think that wireless is an MEA that is open to the Commission.

³⁶ Chorus letter to Keston Ruxton, 5 March 2014 at pages 1 to 2 (UBA TSLRIC Cross-submission).

³⁷ James Every-Palmer "FPP determination: Issues re service description and the modern equivalent asset" (12 March 2014) at page 8 (FPP Issues Paper).

³⁸ James Every-Palmer, FPP Issues Paper at [31].



128 The Commission notes:³⁹

Accordingly, our current thinking is that the UBA MEA will utilise Chorus' copper based inputs potentially with rural broadband initiative (RBI) fixed wireless in place of copper in some rural areas.

Dr Every-Palmer outlines his view that the current network (as opposed to the RBI network) is the appropriate input for the UBA service:⁴⁰

As I understand it, the basis for this approach is that a new entrant seeking to compete with Chorus' UBA service would utilise either copper or RBI fixed wireless as it considered appropriate.

In my view, if the current access network is to be used as an input, then it seems more appropriate to limit this to Chorus' actual network as this is the network pre-supposed by the service description (as per Chorus' argument above).

- 130 We agree. As set out in our UBA TSLRIC Submission and UBA TSLRIC Crosssubmission, there are a number of reasons why RBI is not the appropriate MEA, such as:
 - 130.1 The geographic scope of the UBA STD service being priced is set in the UBA STD. That scope is set by reference to where Chorus provides ADSL or ADSL2+;
 - 130.2 There are a number of end-users in RBI fixed wireless areas who are currently served by Chorus' ADSL or ADSL2+; and
 - 130.3 For those customers, as discussed above, the MEA must take the UCLL and SLU services as inputs.
- This means the UBA service being priced has the geographic scope set at however widely ADSL or ADSL2+ is available, and 100% of that service is supplied using Chorus' copper local loop network as inputs.

Should the Commission build a single model for UCLL and UBA?

- The Commission should model the UCLL/SLU and UBA services separately, which is consistent with the legislative framework being applied.
- 133 As noted by the Commission, Dr Every-Palmer and Chorus:
 - 133.1 the Commission must select the UBA MEA taking Chorus' copper local loop network as a given; and
 - 133.2 the Commission should avoid introducing a competitive distortion which would result from modelling a single fibre network,

³⁹ Commerce Commission "Process and issues paper: Determining a TSLRIC price for Chorus' unbundled bitstream access service under the final pricing principle" (7 February 2014) at [17].

⁴⁰ James Every-Palmer, FPP Issues Paper at page 9.



in each case requiring DSL, a copper-inputs MEA, to be modelled.

- 134 The Commission is also tasked with setting the TSLRIC costs of each service independently (other than when addressing relativity), which means undertaking standalone assessments of the MEA which has to be possible in the framework as it stands.
- The point is made well by Dr Every-Palmer, who highlights that it is inappropriate to conduct one MEA assessment across two services simply because two pricing review determinations are underway in parallel:⁴¹

The Act envisages that some of the designated access services may be subject to FPP prices while others will remain subject to IPP prices. This suggests that... the MEA and FPP price that apply for a particular service should not be affected by the time at which the application was made or what other FPP applications were live at the same time.

- A single MEA would also present challenges in identifying the separate UCLL, SLU and UBA pricing components required by the three separate STDs subject to pricing review applications.
- 137 Notwithstanding this, coherency is important across the regime the Commission is administering and we agree with Dr Every-Palmer's guidance on this. As we note in terms of assessing section 18, absent any guidance or framework on how the Commission is thinking about the whole framework and matters such as relativity, the ladder of investment and copper to fibre migration, this is evolving through these processes.

⁴¹ James Every-Palmer, FPP Issues Paper at [38].



RELATIVITY

- 138 The Commission is tasked with considering the relativity between the UCLL and SLU prices and the UBA price. This is a mandatory consideration and requires more than simply setting two TSLRIC prices. If that were intended there would have been no "additional matter" added into the Act.
- 139 The first question for the Commission is what is the relativity between? For example:
 - 139.1 Are the UCLL and SLU prices separate or a single price for the purpose of relativity;
 - 139.2 Is the UBA price nationally averaged, or disaggregated across UCLL and SLU lines; and
 - 139.3 What is the relativity between these two points?
- Once the Commission has identified the relativity, the Commission has referred to efficient investment. This is likely to require consideration of whether the relativity allows for efficient investment, and the impact of that across a broad spectrum of UCLL and SLU areas.
- 141 If the relativity has different impacts in different areas, then the Commission will need to assess how this is reflected in any TSLRIC modelling.
- 142 The Further Consultation Paper grapples with the complicated structure of layer 1 and layer 2 services established by the Act and the STDs in the context of relativity. These complexities do present challenges. However when thinking about what is possible in a PRD, the Act sets some starting points:
 - 142.1 The Commission must make PRDs on the price review applications before it; and
 - 142.2 When making a PRD for an STD service the Commission must set a price that reflects the TSLRIC cost of the STD service. As explained in the attached Chapman Tripp advice the outcome of cost-reflective prices for access services is a fundamental feature of the Act.
- 143 A pricing review process is not the right mechanism for making structural changes to the existing framework implemented by the Commission.

Mandatory consideration

144 The Act requires the Commission to take into account "additional matters to be considered regarding the application of section 18" when setting the UCLL and UBA prices. These additional matters are (respectively):



The Commission must consider relativity between this service and Chorus' unbundled bitstream access service (to the extent that the terms and conditions have been determined for that service)⁴²

The Commission must consider relativity between this service and Chorus' unbundled copper local loop network service (to the extent that the terms and conditions have been determined for that service)⁴³

- Section 19 of the Act requires the Commission to consider the purpose set out in section 18 and any additional matters set out in Schedule 1 regarding the application of section 18, in making its price review determination.
- 146 Therefore the relativity requirement is a mandatory consideration whenever the section 18 purpose is applied in setting the TSLRIC prices for UCLL and UBA.

Meaning of relativity

- 147 Dr Every-Palmer agrees that the Commission must consider relativity, and explains that the "staggered" structure of different designated access services may indicate that prices should be set in a manner which preserves the so-called ladder of investment. 44
- The legislative intent of the relativity consideration seems to require the Commission to consider whether its pricing decisions are consistent with the "ladder of investment" that the regulated access services were intended to create. That is, whether the prices of UBA and UCLL are such that an access seeker has an incentive to migrate its business from the UBA platform to the UCLL platform.⁴⁵ The ability of an access seeker to move up the ladder of investment was seen as promoting the section 18 purpose.
- Despite this, the view of a number of other industry participants is that the ladder of investment is "dead".

Analysis required

The practical question is identifying what is required of the Commission when considering this "additional matter". The Commission has summarised its starting presumption on relativity as follows:⁴⁶

...the relativity consideration would likely be maintained given that both UCLL and UBA prices were to be set in accordance with similar TSLRIC-based forward-looking cost-based price

⁴² Telecommunications Act 2001, Schedule 1 Part 2, Subpart 1.

⁴³ Telecommunications Act 2001, Schedule 1 Part 2, Subpart 1.

⁴⁴ James Every-Palmer, FPP Issues Paper at [27].

⁴⁵ See Cabinet Policy Committee "POL Min (06) 7/9: Telecommunications Stocktake" (3 May 2006); Ministry of Economic Development "Discussion Document: Regulatory Implications of Structural Separation" (September 2010) at [13], [25], [26], [41]; Commerce Commission "Response to MED Discussion Document 'Regulatory Implications of Structural Separation'" (October 2010) at [15 – 22]; Commerce Commission "Decision No NZCC 37: Final determination on the benchmarking review for the unbundled copper local loop service" (3 December 2012) at [278 - 282]; Commerce Commission "UCLL Benchmarking Conference" (19 September 2012) at page 129.

⁴⁶ Commerce Commission "Further consultation on issues relating to determining a price for Chorus's UCLL and UBA services under the final pricing principle (14 March 2014) at [4].



methodologies. We noted that this is likely to provide incentives to unbundle where efficient to do so.

- 151 We disagree with the proposition that applying TSLRIC pricing rules to the UBA and UCLL services can be assumed on its own to maintain the relativity consideration. Or, to put that another way, that the Commission is not required to consider relativity any further as long as it sets TSLRIC prices.
- 152 Rather, the Commission must turn its mind to relativity as an additional consideration to what it would otherwise consider when applying TSLRIC. This is evident in the statutory framework:
 - 152.1 If Parliament had intended the relativity consideration to be automatically met by application of the statutory pricing rules then it would not have included the "additional matter" of the relativity consideration in the statutory service descriptions;
 - 152.2 The application of TSLRIC involves an exercise of judgment on the Commission's part. So relativity should be used, alongside section 18, in making those judgments and cannot be considered automatically achieved.
- The Commission must have due regard to relativity and its implications with reference to section 18 and make a decision that best promotes section 18. To do that the Commission seems to be asking about the importance of outcomes and we think, on the Commission's current view, the Commission will have to grapple with the ladder of investment and copper to fibre migration implications. It is difficult to speculate on how the Commission is conceptually considering these very important matters, options and trade-offs without preliminary views.
- In looking at these fundamental matters and considering the impact that its views will have on the market, the Commission will presumably wish to turn its mind to matters including UCLL in the market, the absence of SLU unbundling, that some say the ladder of investment is dead, the significant shift in the industry structure and FTTH policy and implications for migration to fibre and other change in the industry, what it considers is efficient investment and what it does not and how it makes those judgments.

Separate UCLL and SLU prices

When considering the requirement to make a price review determination for the UCLL STD service and a price review determination for the SLU STD service Dr Every-Palmer makes it clear that the Commission cannot "merge" the SLU (cabinetised) and UCLL (non-cabinetised) STDs:⁴⁷

In terms of the historic distinction between non-cabinetised UCLL and SLU, in my view... the Commission cannot merge the two separate STDs as part of the price review process and each must have its own price.; and

⁴⁷ James Every-Palmer, FPP Issues Paper at [34].



- 156 Chorus agrees. This point is explained in the attached Chapman Tripp advice. This is a function of a regime that is focused on pricing service-by-service. The price review process takes the existing service in the STD and requires identification of the TSLRIC cost of providing each service.
- Dr Every-Palmer's paper does not advise directly on which services the Commission must price, although it does imply that the Commission must set a price for the SLU STD service as well as the UCLL and UBA STD services:⁴⁸
 - ...the Commission cannot merge the two separate [UCLL and SLU] STDs as part of the price review process and each must have its own price
- Dr Every-Palmer suggests that the Commission can set the same price for SLU and UCLL, if the distinction is not "meaningful":⁴⁹
 - ...if the Commission's approach to service description and MEA imply that the present distinction is not meaningful for modelling purposes, then the same price could apply in relation to both STDs.
- 159 It is not clear what is meant by saying the distinction may not be "meaningful". The TSLRIC of the SLU STD service (excluding SLU backhaul) may well be equal to or greater than the TSLRIC of the UCLL STD service but this will be determined by modelling the full network to find the TSLRIC for each. The costs and prices for UCLL as compared to the combination of SLU and SLU backhaul are substantially different (reflecting the investment that has to be made in cabinetisation). We assume the high level discussion in Dr Every-Palmer's advice is not intended to suggest otherwise.
- 160 Dr Every-Palmer also suggests there is no parliamentary intention that the price difference between UCLL and SLU necessarily continue (which he clarifies to be a suggestion that the price of the UCLL STD service should be equated to the sum of the price of the SLU STD service and the price of the SLU backhaul STD service).
- In his view a common average price would be more consistent with the move to geographically averaged prices. However it is not clear what Dr Every-Palmer is referring to when he forms his view of parliamentary intent or what he is suggesting the Commission do in the section 42 price processes on foot if that is an aim.
- A relevant question for the Commission to consider in the price review for the UBA STD service is what the base price (on top of which the Commission is determining the additional costs for UBA) is bearing in mind the existence of cabinetised and non-cabinetised lines and STDs.
- 163 If UCLL and SLU prices were the same, and there was an averaged UBA price, the relativity consideration is between these two layers of price points.

⁴⁸ James Every-Palmer, FPP Issues Paper at [34].

⁴⁹ James Every-Palmer, FPP Issues Paper at [34].



164 If the UCLL and SLU prices differ (as under the benchmarked approach) and UBA is averaged as today then the relativity consideration raises further complexity. Put simply, there is a different "differential/uplift" between SLU and UBA as compared to UCLL and UBA. That in itself is a clear flag that the Commission must think about this much more deeply and more carefully. For pragmatic reasons, given the limits in the benchmarking processes, the Commission only turned its mind to UCLL and UBA relativity.

The UBA price

- 165 The Further Consultation Paper seeks comment on the potential to de-average the UBA price so that pricing for UBA is different depending upon whether it is on a cabinetised or non-cabinetised line.
- 166 From a business and market perspective this would be a major shift given the majority of customers are served using UBA in New Zealand in a nationally averaged way today. There will likely be significant costs for all participants and real market complexities. Careful discussion with industry would be required if this is what is being suggested as possible and an option.
- 167 It is not clear what outcome would be sought to be achieved if de-averaging did occur and it may be the Commission is giving consideration to relativity and what it considers is efficient/not efficient build/buy outcomes. It is also not clear what evidence or framework the Commission is using to consider this possibility.



BACKDATING

- 168 While we appreciate that backdating increases uncertainty the following matters are important:
 - 168.1 The Act prescribes a two stage process. If the IPP raises concerns then an FPP can be applied for to review the price. It is clearly envisaged and well known that this is the framework and that backdating is relevant because the FPP replaces the IPP;
 - 168.2 All parties are well aware of this situation and everyone is in the same boat of thinking about these issues within their businesses;
 - 168.3 There is no evidence anyone expected that the prices would drop in the way benchmarking has resulted and that the application of benchmarking has been particularly troubled in the case of UBA;
 - 168.4 The consequences of applying a "quick and troubled" benchmarked price are very real; and
 - 168.5 The Commission should not be persuaded by arguments that a structurally separated wholesale only infrastructure provider with a significant capital programme should absorb the downsides of a problematic IPP but RSPs should (if FPPs were to go the other way) certainly have the benefits. This is simply not a sustainable or credible mindset in today's environment and industry structure which comprises both very large and smaller RSPs;
- 169 The Commission should backdate the FPP prices to the date the IPP prices came into effect. The Court of Appeal in *Telecom New Zealand* is clear that backdating is required because the TSLRIC price is inherently more accurate and efficient, and the purpose of the Act is advanced if transactions during the backdating period are washed-up to the more efficient price. ⁵⁰
- 170 As set out in the Chapman Tripp opinion, the key proposition is:

At least in the absence of some truly extraordinary countervailing considerations, any PRD must operate retrospectively, substituting for the (statutorily assumed) less efficient initial price in the TSD – regardless of whether the PRD involves an increased or decreased price for the services.

171 The Court of appeal is clear on this point: 51

If the reviewed price is lower than the initial price the end users will have paid an inefficiently excessive price for the service. But if it is higher the end users would have paid an inefficiently inadequate price for the service. Absent the possibility of the consequences being passed on to the end users in some way, the potential for inefficiencies in relation to end users is unavoidable

 $^{^{50}}$ Telecom New Zealand v Commerce Commission and TelstraClear, CA75/05, 25 May 2006 (Telecom New Zealand).

⁵¹ Telecom New Zealand, CA at [41].



on either the Telecom position or the respondent's position. What can be achieved, however, is the establishment of the most efficient price as between the access provider and the access seeker.

- 172 The Commission has sought further consultation on the question of backdating in its 25 March 2014 supplementary paper. The Chapman Tripp advice considers the further points raised on backdating. In summary:
 - 172.1 It is not important whether the Court of Appeal's reasoning was *obiter*. Having reviewed the Act, the Court of Appeal explains that a PRD must be regarded as being of a "substitutionary nature". Courts are the primary interpreters of statute.
 - 172.2 The Court of Appeal's reasoning is clear enough in its departure from the High Court on the question of discretion.
- 173 Chorus understands that in some cases backdated sums could be significant and for some parties, immediate payment might therefore represent a payment challenge. We are willing to work with the Commission and our customers on payment options. For example, the Commission could implement a payment schedule, whereby customers paid an additional amount to the monthly rental per line (including interest) over a 5 year period (as an alternative to paying the full amount upfront).
- 174 There are examples of this type of approach in the electricity sector. We understand, for example, that the Commission has used a similar method in its Individual Price-Quality Path regulation of Transpower. The Transpower example may provide some guidance to the Commission on the appropriate time period for the payment schedule and the appropriate rate of interest (to ensure recoupment is neutral in terms of its NPV).
- 175 Finally, we are aware that there has been some mention during consultation of an apparent inconsistency between the Chorus and Chapman Tripp positions and Chorus' position in relation to backdating UCLFS under a section 30R review. The Chorus position in relation to UCLFS is outlined in our letter to the Commission of 14 February 2014.⁵²
- We do not consider our position to be inconsistent. The legislative framework for a section 30R is different to the framework for a section 42 application for FPP:
 - 176.1 In the case of UCLFS, the Commission is undertaking a section 30R review of the UCLFS STD price. Such a review is a Commission-initiated reset of the price, where there are reasonable grounds to open a review. It occurs at any time the

⁵² Chorus "Commission review of the STD price list for UCLFS under section 30R of the Act" (14 February 2014), accessible at: http://www.comcom.govt.nz/regulated-industries/telecommunications/regulated-services/standard-terms-determinations/unbundled-copper-local-loop-and-unbundled-copper-low-frequency-services/unbundled-copper-low-frequency-uclf/.



Commission decides, usually once the previous price is determined to be outdated, and not due to an inherent deficiency in the previous price.

176.2 By contrast, an FPP is a party-initiated review of a determination on the grounds that the FPP price will be more accurate than the less rigorous IPP price. An FPP application must be lodged within 20 working days of the IPP determination.

176.3 Therefore:

- an FPP is a review using a different (more sophisticated) methodology, which ought to be backdated to replace the less accurate IPP price, using a more rigorous pricing process; whereas
- (b) s30R is a reset of a presumed-accurate price, using the same pricing methodology process as for the previous STD price.
- 176.4 This is the way the Court of Appeal has interpreted the FPP process in the context of backdating: ⁵³

...a price review determination relates back to the date of the initial determination. That is consistent with the substitutionary nature of reviewing or appellate decisions which vary an original decision.

- 176.5 In the past (such as the recent UCLL, UBA and SLU s30R reviews), the Commission has not backdated s30R reviews to the previous prices.
- 177 The Commission has previously recognised this reset (as opposed to replacement) rationale for a s30R review, in its s30R decision for the UCLL service in 2012:⁵⁴

This review was conducted under section 30R of the Telecommunications Act and in accordance with sections 30K to 30M of the standard terms determination process...

The Commission commenced the UCLL benchmarking review on its own initiative, because a significant period of time had passed since the original benchmarking was conducted. No party sought to have the UCLL standard terms determination reviewed or updated during the intervening years.

⁵³ Telecom New Zealand, CA at [44].

⁵⁴ Commerce Commission "Decision No NZCC 37: Final determination on the benchmarking review for the unbundled copper local loop service" (3 December 2012) at [3 - 4].



PROCESS AND TECHNICAL MATTERS

Confidentiality process

- 178 Chorus supports the issuing of a confidentiality order under section 100 of the Commerce Act 1986.
- 179 There are a number of reasons to implement a confidentiality framework, including protecting information for network security reasons, to manage access to commercially sensitive information that would benefit a competitor and to manage contractual confidentiality requirements.
- 180 Chorus supports a confidentiality framework that is simple while recognising the need consultation. We think that this can be achieved by:
 - 180.1 Having a single category of confidential information;
 - 180.2 Allowing external economic experts access to other parties' confidential information; and
 - 180.3 Allowing internal legal counsel to manage process issues associated with the section 100 order.

The types of confidential information

- The types of confidential information that parties may provide, or be requested to provide, to the Commission are likely to include the following categories:
 - 181.1 Information that may be confidential given network security concerns (the importance and real risks to network security have been recognised in the recently enacted Telecommunications (Interception Capability and Security) Act;
 - 181.2 Information that is subject to confidentiality obligations (including, for example, information a party may hold in relation to third parties); and
 - 181.3 Commercially sensitive information to that party.

Relevant principles to balance

- 182 When considering the terms of the Commission's confidentiality order Chorus supports a regime that:
 - 182.1 Appropriately protects confidential information, including that only information relevant to the exercise is subject to this regime and confidential information is made available only to those who really need to see it;
 - 182.2 Provides sufficient transparency for parties to effectively participate in the Commission's processes; and
 - 182.3 Is simple to administer.



A pragmatic way forward

- A way forward, which appropriately balances these principles, in the context of the Commission's current processes is to simply have one category of confidential information that would be accessible, on appropriate terms, to the parties' external economic experts. This would provide maximum transparency to those most relevant to review the information given the current processes are complex economic modelling exercises.
- 184 Chorus acknowledges that the parties may need to also appoint a lawyer to manage the confidentiality process, and that may appropriately be an internal lawyer. However, if the Commission was responsible for circulating any confidential information, that lawyer would not necessarily need access to the confidential information itself.
- 185 We do note that there may be rare circumstances where the Commission seeks information that is of such a sensitive nature (e.g. for network security reasons) that the information should not be shared with external economic experts. Where a party identifies such information as part of an information request, we think this can potentially be managed byagreeing that the information is supplied at an appropriate level of aggregation that it can be provided to external economic experts.

The alternative way forward

- The alternative approach is to have much more complex regime that, for example, allows access to information by a company's internal advisors. If this type of framework was implemented, the Commission would need to:
 - 186.1 Identify upfront what type of internal advisors could have access; and then
 - 186.2 Determine a number of categories of confidential information, such that only some information could be seen by external advisors and other information by internal advisors (and potentially multiple categories of information depending on the scope of access by internal advisors);
 - 186.3 Implement a process by which parties providing confidential information are able to agree to and/or challenge a third party's request for an internal advisor to have access to its confidential information.
- 187 Given people within a business are more often than not also involved in commercial decisions, the practical risk is that confidential information could also be indirectly used given it is very difficult for those people to effectively create and maintain "Chinese walls" in their heads.
- Section 100(4) of the Commerce Act outlines the penalties for breaches of a section 100 confidentiality order, being a fine not exceeding:
 - 188.1 \$4,000 in the case of a person not being a body corporate; and
 - 188.2 \$12,000 in the case of a body corporate.



These maximum penalties will provide a moderate deterrent, but are small when compared to the commercial gain which could be gained by using confidential information. As a result, the Commission, in implementing its confidentiality order, should be commercially prudent in relation to categorising confidential information and discerning when determining who may be given access to information.

The terms of the confidentiality order

- 190 The terms of the confidentiality order should include:
 - 190.1 Appropriate undertakings to be given by individuals accessing confidential information;
 - 190.2 Information identified as confidential should be presumed to retain that designation, although the Commission may implement a process for examining whether information does need to be categorised as confidential, including whether the information is not commercially sensitive or is in the public domain; and
 - 190.3 Strict rules for use and destruction of confidential information provided.

Expiry date clarification

191 The Commission has confirmed its proposed position on the expiry of the relevant pricing review determinations, with one additional step not summarised by Chorus in Chorus' UCLL TSLRIC Submission:⁵⁵

...it is possible that the UCLL **model itself might need to be updated** as part of amending the STD to update the UCLL price before the expiry of the pricing review determination [emphasis added]

192 In the Chorus UCLL TSLRIC Submission, we outlined our understanding that:⁵⁶

The Commission intends to amend the STD using section 30R of the Act, to set a new price to come into effect on the day of the expiry of the price review determination (the "updated price"). The updated price will not be the PRD price, but rather will be a price calculated **using the UCLL model, run with updated data**. [emphasis added]

193 Given our summary referred to using the model with updated data, we understand the Commission's clarification to be signalling the model itself may be changed. This clearly implies a more significant consultation process at the relevant time.

⁵⁵ Commerce Commission "Further consultation on issues relating to determining a price for Chorus's UCLL and UBA services under the final pricing principle" (14 March 2014) at [6].

⁵⁶ Chorus, UCLL TSLRIC Submission at [152.2].