



UCLL and UBA FPP: further consultation and supplementary paper

Submission | Commerce Commission

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Executive Summary

The Commission has asked for comments on its approach to:

- Identifying the modern equivalent asset (**MEA**) and service;
- Whether to apply an aggregate approach to costs;
- Relativity considerations; and
- Backdating.

We comment on each of these matters in our submission, as well as the process we would like the Commission to follow now it has announced what we consider to be aggressive completion dates for these FPP processes.

These FPP processes are designed to provide efficient prices that reflect those that would be delivered to access seekers and end-users in a competitive market.

What is the purpose of the FPP process? This is a surprisingly simple question that will sit at the heart of the multitude of decisions the Commission will need to make in the coming months as it constructs its FPP models for the UCLL and UBA services.

Because in order to make those decisions, to give them meaning, the Commission must employ a theory for what the purpose of the outcomes of these processes is. Clearly the purpose is not to calculate an acceptable rate of return for Chorus' existing networks – the Act would have said that is that was intended. Equally clearly, it is not to provide build/buy signals to access seekers considering deploying their own networks; no-one anticipates any access seeker deploying a further UCLL network in New Zealand.

Rather, we consider the most sensible interpretation of the s18 purpose statement, and the TSLRIC and forward-looking costs definitions in the Act is that the purpose of these prices, and the processes to calculate them, is to provide efficient prices to access seekers and their end-users that reflect those that would be observed in a competitive market.

In this context, it is clear that the Commission must have discretion to choose the MEA that best meets this purpose, and equally clear that that MEA must be based on an FTTH architecture

The Act directs us in these FPP processes to set forward-looking efficient cost-based prices for the UCLL and UBA services. Forward-looking. Efficient. We have to give real meaning to those terms. That means the MEA we model must:

- Be capable of delivering the core functionalities of the services (we concur with Dr Every-Palmer's conclusion on this point);
- Reflect the decisions an efficient operator making network deployment decisions based on current information, assets, demand and available resources; and
- Incorporate the mix of network architectures that deliver the core functionality of the service in the most efficient – lowest cost – manner, having regard to forecast demand and demand risks.

The Commission has identified a range of potential network architectures for use in its UCLL and UBA MEAs. Principally, FTTH, FTTN, copper access and fixed wireless/mobile. Each of these architectures are in operation today, and all are capable of delivering the core functionality of the services.

We consider it self-evident, though, that any efficient provider operating a broadband network today and with an understanding of customer demand for broadband speed and performance, would deploy FTTH architecture as a preference unless its cost profile was demonstrably and significantly inferior to the second-best alternative (FTTN or fixed wireless/mobile depending on topology and density). If we are to give the term “forward-meaning” any real meaning, it must lead us to this conclusion.

This leads us to the question of whether FTTN or wireless architectures are, *prima facie*, likely to exhibit greater efficiency - lower cost profiles – than FTTH in any locations.

Given FTTN and FTTH networks will share the same trenches, ducts and civil infrastructure, it is not obvious to us why the costs of these architectures should depart in any significant way for any given topology.

In contrast, we do have evidence to suggest that wireless network architectures may well be demonstrably more efficient in certain non-urban areas of New Zealand, The Commission’s TSO modelling (and the Court’s commentary on it) confirmed this, and the structure of the Government’s UFB and RBI initiatives mend further credence to this proposition.

We therefore recommend the Commission:

1. Use FTTH as the default network architecture in its MEA; and
2. Apply a “wireless cap” in the same way as it did in the TSO process to determine where wireless solutions would supplant FTTH within the MEA.

OR if the Commission chooses instead to use FTTN as its default network architecture:

3. Apply a “FTTH cap” to ensure its process does not produce the counter-intuitive proposition that an efficient provider would deploy an FTTN network in preference to FTTH even where that proved more expensive; and
4. Also apply a “wireless cap” in the same way as it did in the TSO process.

Each of these approached necessitates that the Commission’s modelling programme be capable of incorporating multiple MEAs – we can see no way for the Commission to avoid this requirement and yet still produce a robust result.

Complementary FTTH MEAs for UCLL and UBA must be preferred, but we acknowledge this is not required by the Act

We consider the above analysis holds equally for UCLL and UBA - an efficient network operator today would *of course* choose to deploy FTTH and FTTH-based electronics whether it was deploying a layer 1 or layer 2 broadband network unless the costs of doing so materially exceeded the alternative.

There is much to be gained from coherent and complementary UCLL and UBA MEAs - simplicity of process and confidence that costs will not be double-counted or slip between the cracks that must inevitably exist where disconnected MEAs are used. These advantages lend weight to our recommendation to use the same underlying default MEA for each service.

That said, we also agree with Dr Every-Palmer's conclusion that the Act does require the use of complementary MEAs. It must be right that the Act enables FPP processes for each service to be carried out in isolation from each other. We expect it will be technically possible to, for example, model a DSL-based UBA MEA over the top of an FTTH-based UCLL MEA.

Chorus' proposed approach inevitably leads to revaluation gains

The MEA we model cannot be a simple analogue of Chorus' current network. It cannot be concerned with Chorus' actual network architecture or investment decisions. The pricing model we are directed by the Act to apply is founded in efficient, forward-looking TSLRIC prices. That is a very different model to rate of return regulation of Chorus' actual network. Given the heavily depreciated nature of Chorus' legacy copper network, this distinction is of significant value to Chorus because it will by definition provide it with revaluation gains for assets it is either not replacing or is replacing with taxpayer subsidies.

In suggesting that the Commission must, in applying this forward-looking model, roll forward the exact network Chorus has built asks the Commission to roll forward the inefficiencies inherent in it (such as existing cabinet locations), and thereby increase the quantum of these revaluation gains.

Similarly, the Commission should not concern itself with questions of Chorus' recovery of normal rates of return on its investments unless and until Chorus provides evidence that proves that forward-looking cost-based prices will not enable this. Dr Every-Palmer's first opinion appeared to wrongly discount the use of an FTTH MEA for UBA on the basis of this concern.

The Commission has set an aggressive timeline for completion of these processes. The best way to achieve this timeline is to provide additional consultation opportunities

Finally, we note the Commission's recent announcement of a 1 December 2014 target completion date for each FPP process. While we support the Commission striving to deliver certainty for our industry at the earliest possible point, we have been clear that we consider a longer period of time is needed to ensure we arrive at robust and sustainable FPP outcomes. Our understanding of the complexities of the modelling that will be required for these processes, and our assessment of the time we as industry participants will need to digest, consider and respond to drafts of that modelling, extends that timeline considerably beyond 1 December.

Nevertheless, if we are to aim at this date, we believe the Commission would be wise to add a consultation on key model parameters and information sources, and Commission emerging views, prior to the draft decision in August (even if that extends the draft decision timing beyond September). The current timeline raises a significant risk that one or more parties will raise significant design, mechanistic or methodological issues with the Commission's model in their submission on that draft decision that are:

- Not capable of response by other parties within the two-week cross-submission period, necessitating an extension in the time required for this step (this seems highly likely to occur); or
- Not capable of resolution/consideration by the Commission and its advisors in time to meet the 1 December date.

We are also concerned that parties may produce their own cost models at the submission stage on the Commission's model. If this were to happen, it seems likely to us that would add considerable complexity to the cross-submission timelines and to the Commission's post-draft process. We recommend that the Commission seek early confirmation from parties of whether they anticipate producing their own costs models as part of the submission process.

Introduction

1. Thank you for the opportunity to comment on the Commission’s further consultation on issues relating to determining a price for Chorus’s UCLL and UBA services under a final pricing principle (FPP), and supplementary paper.
2. The Commission has also requested comments on legal opinions prepared by Dr James Every-Palmer.
3. The key questions faced by the Commission, in light of preliminary legal advice, are:
 - a. What are the outcomes the FPP is expected to achieve in light of the statutory framework?
 - b. What is the purpose of the MEA and how does the choice of MEA for UCLL and UBA FPP support the FPP outcomes?
 - c. Is the proposed approach consistent with “relativity” considerations?
 - d. Should the Commission set aggregate or disaggregated services prices? and
 - e. How should the Commission apply its discretion in regard to possible backdating of FPP prices?
4. We address these comments in our response, and we also comment on implementation matters raised by the Commission. We recommend that the Commission undertake an interim consultation to test draft model inputs prior to releasing a draft determination.

What are the outcomes that the FPP is expected to achieve?

Efficient forward looking costs

5. As set out in our earlier 14 February March submission, we consider the statutory scheme directs the Commission to produce an FPP outcome that achieves an efficient price for each of the UCLL and UBA services, i.e. a long run price that provides efficient signals to infrastructure providers, RSPs and consumers.
6. We expressed this as reflecting the outcomes that would be provided by a competitive market. What matters is that workably competitive markets have a tendency towards generating certain outcomes. Efficient prices in a workably competitive market approach long-run marginal cost and provide normal returns to investors. These are the minimum forward looking costs associated with maintaining the service capability, and consistent with a normal economic return to the provider. These provide the efficient pricing signals that sit at the heart of a TSLRIC pricing methodology.
7. Seeking to achieve these price signals makes sense from a policy perspective. It’s generally accepted that efficient resource use by infrastructure providers is optimised when prices approach long run marginal cost and provide a normal return to providers.

8. The High Court summarised the competitive market outcomes as:

[20] But the *tendencies* in workably competitive markets are towards such returns and prices. By themselves, these tendencies will also lead towards incentives for efficient investment (investment that is reasonably expected to earn at least a normal rate of return) and innovation. That is to say, the prices that tend to be generated in workably competitive markets will provide incentives for efficient investment and for innovation.

[21] The same tendencies towards prices based on efficient costs and reasonable rates of return will lead also to improved efficiency, provision of services reflecting consumer demands, sharing of the benefits of efficiency gains with consumers, and limited ability to extract excessive profits.

9. These policy choices have been carried forward in to the legislative framework which promotes competition by ensuring that regulated services are priced efficiently. The FPP requires a focus on recovery of efficient costs:

- a. Section 18 and 19 make it clear that the purpose of the pricing principles in Schedule 1 is to promote competition by regulated services being priced efficiently;
- b. The references in the definition of “forward-looking common costs” to efficient costs make clear that inefficiently incurred cost should be excluded from any FPP exercise; and
- c. The references to forward-looking costs clarifies that where historic choices may have been inefficient they are not relevant to the exercise; that an efficient provider would make decisions based on current information, assets, demand and available resources; finally forward looking technology choices and costs must not entrench new inefficient choices..

Forward looking does not require replacement cost methodology

10. Chorus has proposed that “forward looking” requires the Commission to model the existing network at current replacement costs [78 of February 2014 submission]. This cannot be correct. This approach suggests the Act directs the Commission to implement a pricing methodology that provides Chorus with revaluation gains at the expense of end-users and results in a price that must demonstrably differ to that we (and end-users) would expect a competitive market standard to deliver.

11. As set out in our earlier submissions, the emphasis on “forward looking costs in the long run” captures an important point. In a workably competitive market, in the long run, cost-based prices converge with the economic cost of supplying products and services based on the most efficient current technologies and associated productivity benefits at a given time point, and irrespective of the sunk costs actually incurred by market participants. For this reason, forward looking long run costs at a given time point provide the right signals, for most efficient resource use and allocation, to incentivise innovation, and to drive new investment. Accordingly, the use of replacement costs for current assets can only be justified to the extent that those costs reflect the efficient forward looking costs incurred to provide those assets.

12. The mechanistic application of replacement costs as proposed by Chorus departs from these efficient pricing signals. The approach inevitably captures inefficiencies and asset costs that will not be incurred, or required, looking forward (such as reused civil engineering infrastructure). Accordingly, the costs do not necessarily reflect the forward looking costs that would be incurred by an efficient supplier of the service, and consequently bear no direct relation to the revenue a supplier would need to obtain to maintain intact its service capability. Using these costs as the basis for pricing decision will distort consumption and investment decisions. In other words, Chorus' mechanistic approach is divorced from efficient forward looking revenue requirements; it can't provide the efficient pricing signals required by the FPP.
13. The Courts have recently critically examined the core principles behind optimised and forward-looking cost modelling in the context of a statutory purpose of advancing the long-term interests of end users. Their conclusions support the contention that these principles should be applied in a way that best replicates competitive market outcomes.
14. The Court also considered whether, in the context of Part IV of the Commerce Act, the Commission was "required" to apply new Optimised Deprival Cost (**ODV**) valuations to establish initial RAB values. They found that this would introduce significant risk of revaluation gains (or losses) which would be directly contrary to this competitive market standard, and so found that this interpretive argument must fail.
15. Chorus is essentially presenting exactly the same argument here, and it must fail for the same reasons.
16. The approach to forward looking costs needs to be considered in the market, technology and policy context. Overseas policy makers and regulators are considering forward looking cost models in light of today's context – aiming to send efficient signals to investors and consumers. These are the approaches referred to in our February submission, whereby regulatory cost models reflect the costs (investments) of next generation networks actually being deployed. Current cost methodologies are applied to assets to be replaced, while existing reused and unlikely to be replaced capability is valued at historic cost.

What is the purpose of the MEA and how does the choice of MEA for UCLL and UBA FPP support the FPP outcomes?

17. The Commission is required to use TSLRIC to set a price for the service under the Act; and TSLRIC requires assessment of the forward looking costs of providing the service over the long run. In other words, the efficient costs. The MEA concept has been developed as an economic tool to help practically identify what these efficient costs might be. The approach enables the Commission to assess these matters in the abstract without being clouded by potential inefficiencies and any market power returns which may have existed in incumbent pricing or as the result of a variety of past investment decisions.
18. Accordingly, the MEA options should reflect the technology options available to an efficient provider that could deliver the service. The selection of the most appropriate MEA should be

based on the lowest forward looking cost means of providing the service to a given region, and in light of the other services supported by the technologies.

19. Conversely, the services supported by the MEA need not be identical to the regulated service, rather they need to be a reasonable substitute reflecting the aspects of the regulated service most valued by consumers – competition is characterised by small differences in competing products and end-users benefit from these differences and the competition they create. We believe that the core functionality approach proposed by Dr Every-Palmer is a practical way to capture this dynamic.
20. Accordingly, this is where we agree with Dr Every-Palmer’s view that:
 - a. The inquiry should be directed at determining the efficient cost today of an equivalent service unconstrained by the historic technology choices of Chorus or consumers [4]. The MEA is a thought experiment that allows the Commission to answer the question to identify efficient costs;
 - b. We support and agree with Dr Every-Palmer’s analysis and conclusion that, as a matter of law, the Commission is not required to adopt a modern equivalent asset (**MEA**) which replicates the specific features of Chorus’ present copper network; and
 - c. The Commission has discretion in determining the MEA to be used to inform the cost models for UBA and UCLL. Although, as set out below, we consider that there is no reason for the Commission to use a different MEA for each of UBA and UCLL. It should use a FTTH MEA for both services – fibre is the modern asset that would be used for the local loop and layer two network services.
21. It is important that the Commission clearly articulate its draft view on the role of the MEA, the choice of MEA, and the reasons for that choice in performing that role and informing the TSLRIC exercise.

A FTTH network, with a fixed wireless cap

22. Putting all of this together we interpret the Act as directing the Commission to choose a MEA, or mix of MEAs, that:
 - a. Is capable of delivering the core functionality of the service(s) most valued by consumers;
 - b. In the most efficient way; and
 - c. Is forward-looking and does not reflect path dependent technology choices made, in this case, by Chorus in the past.
23. The first of these criteria is a simple threshold question. The second, efficiency, directs the Commission to the lowest cost MEA that meets the core functionality threshold. And the third, forward-looking, clarifies that where the costs of particular technologies are similar, the

technology that best addresses forecast demand and demand risks (such as potential changes in demand), should be chosen.

24. Having regard to these criteria, common sense, as well as empirical evidence of existing network deployments leads us to the conclusion that an FTTH network should be the “default” network architecture for the Commission’s MEA for both the UCLL and UBA services:
 - a. An FTTH network clearly meets the “core functionality” threshold;
 - b. We expect that the forward-looking costs of a FTTH network will be similar to those of any other fixed network architectures, such as FTTN and copper access networks in most topologies (and possibly superior to those of mobile or fixed wireless networks in most, but not all, places); and
 - c. We consider it to be self-evident that an FTTH will best meet the forward-looking requirement in the Act, being the network that is best suited to meet forecast demand and respond to changing demand (eg for increasing broadband speeds).
25. In fact, if we assume that the fixed network architecture options’ cost profiles will be roughly similar (and all the evidence we have supports this notion), then it seems apparent to us that a FTTH network architecture is the only possible “default” architecture under the Act. There is simply no coherent argument to support a proposition that any efficient network operator building a broadband network service would, given similar cost profiles, choose any other fixed network architecture.
26. If, however, the Commission chooses a FTTN network architecture as the base architecture for its MEA, then we recommend it also model a FTTH MEA in parallel, and use this architecture either to “cap” FTTN costs, or to replace FTTN architecture in areas where FTTH proves cheaper. There can be absolutely no argument that any efficient provider would deploy FTTN in any area if that proved to be more expensive than deploying FTTH.
27. The evidence we have also supports the conclusion that non-fixed network (wireless) architectures may well be more efficient – lower cost – in some areas of the country than a FTTH network. The Commission and the Courts have previously considered the respective economics of an “efficient” provider of TSO services, and concluded that non-fixed network architectures are more efficient in some non-urban areas of New Zealand. The Government’s choice to focus on subsidised FTTH deployment in 75% of New Zealand, and subsidised FTTN and mobile network deployment in 25% provides further support for this conclusion.
28. We therefore also conclude that the Commission should apply a wireless cap to FTTH costs as it did with TSO.

UBA adjustment

29. As set out above, we agree that the Commission has discretion to select the MEA, the sole requirement being that the approach taken best delivers the FPP outcomes.

30. The Act provides for each service to be independently priced using either an IPP or a FPP. On a simple reading of the Act it is possible for the Commission to set the UBA price, as an increment of additional costs independently of the UCLL pricing review. This conclusion is consistent with Dr Every-Palmer's view that Act does not require a single or multiple MEAs – although there are reasons why the Commission should prefer a single MEA all other things being equal.

A single fibre MEA

31. Nonetheless, a single MEA has practical advantages and can be argued to be more consistent with the scheme of the Act. It removes the risk that elements of cost might either be double counted in both UBA and UCLL cost models, or omitted completely from both. In particular, as UBA costs are described in the Act as an increment to UCLL costs, the question of where the demarcation between UBA and UCLL sits, and how to ensure this demarcation is accurately reflected in the models will be of critical importance.

32. We believe it is possible to estimate efficient layer 2 costs with a fibre MEA. In an underlying UBA MEA based on FTTH via GPON, the UCLL-equivalent and UBA-equivalent services would be substantially similar in terms of their start and end points in that GPON network as in today's copper network. The principal differences in network architecture would be the type of electronic equipment used to provide the bitstream service, and the lack of any active cabinets in an FTTH network. We do not believe that these differences will drive significant differences in costs of the UBA service (certainly not sufficient to reduce UBA costs to "negligible" levels). Even if they did, though, as long as efficient costs have been signalled the purpose of the Act is being met because the FPP will signal efficient costs (as opposed to sustaining a particular technology or business model where this is inefficient).

33. Accordingly, we recommend the Commission apply a UBA MEA that uses FTTH-based electronics as its default. That is demonstrably the MEA that best meets the forward-looking and efficiency criteria of the Act.

A DSLAM-based UBA MEA while applying an FTTH UCLL MEA

34. While we consider the application of complementary FTTH-based MEAs for both UCLL and UBA would best meet the requirements of the Act, we agree with Dr Every-Palmer's conclusion that separate MEAs can be chosen for these services.

35. In the case of UBA, this means it is open to the Commission to consider including the costs of a DSLAM-based MEA for UBA to sit atop a FTTH MEA for UCLL. This can be achieved by modelling that part of the active cost elements required, (principally including efficient DSLAM and data switch capacity costs). We set out an overview of the approach to allocation between active and passive cost elements in paragraph 39 below. The degree to which the costs of a DSLAM based UBA MEA should be recognised require consideration of the forward looking long run requirement in the Act's definition of TSLRIC.

36. It would also be theoretically possible to include the active cost elements of cabinets containing layer two equipment into a FTTH MEA to properly determine efficiently incurred additional costs for UBA if necessary (although we question whether this would meet the efficiency and forward-

looking criteria of the Act). If this were also done, it would enable the Commission to model all of the UBA costs that “break-out” from a theoretical fibre MEA in a manner that is functionally and analytically acceptable.

37. If active cabinets are modelled – within either an FTTH or FTTN MEA - we understand the typical approach to costing bitstream services would seek to recover the costs of the active portions of a cabinet within the monthly price for a UBA-equivalent service. This is likely to require a similar approach to the allocation of costs to the UBA service irrespective of the choice of MEA. We think that this would be a reasonable approach to take in order to ensure both an element of realism in modelling cost based prices, and that relativity is maintained during the period of transition as required by the Act.
38. Following this approach, the additional long run forward looking incremental costs (within the scope of the definition of “TSLRIC”), incurred in providing the UBA service, would require that the following allocations of active cabinet costs be made for UBA in both an FTTN and a FTTH MEA:
 - a. Adding the difference in the costs of an active cabinet over and above the cost of a similarly functional passive cabinet associated with the costs of, and associated with the power, cabling and space allocation for, the MSAN (as the MEA for a DSLAM) excluding line cards and line card slot cabling (to the extent used);
 - b. Possibly adding the cost of passive elements from the active cabinet back to the exchange; and
 - c. Adding the cost of transport capacity for aggregated traffic from the back of the MSAN in the active cabinet to the first data switch, typically based on a price per MB per km.
39. In the end, while the Commission would need to check with TERA, we understand from the recent workshop that it would adopt similar access cable centres (i.e. cabinet nodes) irrespective of whether it assumes an underlying copper or fibre network. In which case, under any UCLL MEA option, it’s likely to be possible to identify and ensure no double counting of relevant costs. In the case of fixed wireless, the wireless equipment would also equally use backhaul fibre and equipment enclosures.
40. We think it is clear that this approach would enable the Commission to ensure that the relativity requirement can be satisfied. Additionally, two important conclusions can be drawn, given that a broadly similar allocation approach to fully reflect the costs of UBA is required irrespective of the choice of MEA. First, the choice of MEA should be dependent upon the technology which best meets the forward looking criterion, and second, a consistent choice of MEA between the UCLL and UBA models minimises the risk of double counting or omission of cost elements. We believe the Commission should apply a FTTH MEA as default to both services as this is the efficient forward looking market we are working towards.

The Commission’s task is to give true meaning to the “forward-looking” requirement in the Act. It should not be concerned with legacy investment decisions taken by Chorus.

41. Dr Every-Palmer’s first opinion posits an understanding that use of an underlying FTTH MEA for the UBA service may “imply negligible additional costs for UBA”.¹ This is not necessarily the case. As we set out above, we consider it is technically possible to model a UBA service which uses a FTTH MEA, using either fibre-specific or copper-specific broadband electronics. We understand that UBA cost modelling over a FTTH network has been undertaken elsewhere (in Denmark for example) and encourage the Commission to enquire further with its advisors as to the practical applicability of this approach in New Zealand.

42. Dr Every-Palmer’s first opinion goes on to say:

“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 its current network”²

43. This seems to imply that the Commission should have reference to Chorus’ actual investment and return on that investment when considering the appropriate MEA to adopt, which cannot be a correct application of the Act. We do not consider these are legitimate considerations for the Commission’s choice of MEA in this instance. The Act is clear that the Commission is (a) modelling an efficient provider’s network, not Chorus’; and (b) is modelling that network on a forward-looking basis.

44. It may be plausible that, were such a modelling approach to result in regulated access prices that prevented Chorus making a reasonable return on its actual investments, section 18 considerations would lead the Commission to adjust those prices. But it seems unlikely that any forward-looking model for these services – no matter what MEA is used – will approach this level of price given the heavily-depreciated nature of Chorus’ actual assets. In that unlikely case, we would expect Chorus to provide evidential proof of this outcome.

45. In the absence of this evidence, the Commission must simply select the underlying MEA for UBA that best meets the legislative criteria outlined above. In the case of UCLL and UBA, the analysis will be very, if not entirely, similar for one simple reason: both services are predominantly used to support the provision of retail broadband services in the first instance, and retail voice services in the second. Assuming again, that there is no fundamental cost difference between FTTH, FTTN or copper access network, the only realistic conclusion we can reach is that any efficient wholesale broadband network provider would adopt the same MEA for UBA as it would for UCLL – FTTH – subject to a wireless cap. That is what we recommend.

¹ Further Consultation on issues relating to determining a price for Chorus’ UCLL and UBA services under the final pricing principle, Attachment A, row 1 in the table following paragraph 29.

² Ibid.

Is the proposed approach consistent with “relativity” considerations?

46. The Commission must consider the relativity between UBA and UCLL when applying its competition analysis under section 18 of the Act³. One valid interpretation of “relativity” is that, when the Commission sets both prices at the TSLRIC cost-based level, the correct relative investment signals and incentives are set in a way that best promotes competition and the competitive outcomes sought by section 18. That interpretation is consistent with conventional economic thinking and the court’s view in the *Wellington Airport and Others* that an efficient cost-based price best achieves competitive outcomes, including the setting of the right incentives for investment.⁴
47. In this case, relativity requires that the Commission ensure that a consistent approach is taken to determining TSLRIC cost-based pricing (with outcomes reflecting relative costs) of each relevant service in the value chain.
48. We do however accept that relativity could have a different meaning in other cases, such as where:
- a. The UBA price is set with reference to retail minus and UCLL is set with reference to benchmarked costs; or
 - b. Where UBA is set using benchmarking, and the UCLL price is set using a TSLRIC model on the other, there may need to be a separate “relativity” exercise to ensure that the pricing determined using different methodologies does not distort the relativities that best give effect to competition.
49. In this case, because the two TSLRIC cost-based exercises are being conducted at the same time and in accordance with the same TSLRIC pricing principle, the best way to give effect to relativities that support section 18 is to apply a consistent, cost-based approach to both services. There is no other mandatory relevant consideration the Commission is required to apply when giving effect to the relativity requirement if consistent cost-based pricing does so explicitly.
50. There is certainly no requirement to make any adjustment to favour investment in one or the other service where both prices are set at nationally averaged cost, or to identify a “relativity standard” with reference to one or more real-world access seekers. A separate adjustment which seeks to favour one service over the other is more likely to distort the relativities that would give effect to competition, and these distortions will have differing effects on different access seekers. Given the very different scale of New Zealand access seekers, attempting to identify a workable relativity standard would be fraught with danger and extremely complex.

³ Additional matters that must be considered regarding the application of section 18 – Chorus UCLL network, and the equivalent section of Chorus’ UBA – in Schedule 1 of the Act

⁴ *Wellington Airport and Others*

The far simpler approach is to arrive at an efficient relativity by applying a consistent cost-based pricing approach to each service.

Comparing this approach to the options table in Dr Every-Palmers opinion

51. Dr Every-Palmer’s first opinion used a table to identify legal risks with different approaches to the MEA. Our view on those options is summarised below:

Options	Our comments
<p>1 – Take Chorus’ copper local loop network as a given and only apply TSLRIC and MEA principles to the facilities associated with the “additional costs” of providing UBA</p>	<p>We think that the first step should be to identify a consistent MEA for UCLL and UBA and then identify the demarcation point from which the additional elements for UBA commence. At that point it becomes possible to determine the efficiently incurred costs for a comparable layer 2 broadband service.</p> <p>This would help achieve consistent pricing for access products along the same value chain and principles.</p> <p>It is completely consistent with the scheme of the Cat to have a consistent MEA for the two services and the best way to properly identify and allocate common costs across the services.</p> <p>We agree with the second point in the opinion.</p>
<p>2. - Take Chorus’ copper local loop network as the starting point, but allow for utilisation of rural broadband initiative (RBI) fixed wireless in place of copper in some rural areas</p>	<p>This approach appears to unreasonably limit the Commission’s enquiry as to the technology architectures that an efficient provider would consider. We think it far more likely that an efficient provider would cost multiple technology options, and select the technology in each area that provided the most efficient and forward-looking solution. This translates into an exercise much more similar to the Commission’s examination of the “wireless cap” in its TSO model than a simple consideration of RBI inputs.</p> <p>RBI inputs by their nature will provide wide, but not 100% coverage of address points in most locations. The question for the purposes of this process is slightly different – what would a wireless network that could reach all address points in a given location cost, and is that cost cheaper than the default MEA option (FTTH)?</p>
<p>3. Use the same optimised MEA for UBA and UCLL (eg FTTH), but use a s 18 price adjustment to create appropriate relativities</p>	<p>In our view the legal risk is limited to the potentially arbitrary nature of the section 18 adjustment. Section 18 adjustments without a very clearly defined and limited framework are problematic.</p> <p>We think it is legally and conceptually permissible to use a consistent MEA in a way that ensures that</p>

Options	Our comments
	the efficiently incurred additional costs of UBA can be properly identified and accounted for.
4. Use the same optimised MEA for UBA and UCLL (eg FTTH) without making any pricing adjustments (on the basis that the s 18 purpose statement is best served by not preserving economic breathing space in relation to some services and some forms of competition)	<p>Because we recognise that it is legally and conceptually permissible to use a consistent MEA in a way that ensures that the efficiently incurred additional costs of UBA can be properly identified and accounted for we do not consider this option carries the legal risk suggested in the first opinion.</p> <p>The Act is concerned with efficiency, and therefore with an efficient relativity. Setting any other relativity standard, for example one which might seek to import real costs faced by access seekers, sets the Commission an impossible task because no two access seekers will face the same costs.</p>

Aggregate or disaggregated prices?

52. We support the Commission setting an aggregated SLU and UCLL price. The Act permits this approach and an aggregate price provides the most sensible translation of the Act’s words into a coherent policy framework. Aggregate prices, by themselves, are unlikely to have any material impact on efficiency or the incentive to unbundle.
53. By taking this approach however, the Commission has avoided both the potential for estimation error in seeking to allocate common costs between UCLL and SLU services, and the associated modelling complexity. Aggregated pricing mitigates the risk that allocation of common costs between the two services inadvertently generates inefficient price signals for one or both services. Inefficient price signals could dis-incentivise or otherwise limit efficient investment choices. Aggregated prices limit this risk, by providing a neutral cost oriented price for services whose core functionality is likely to be valued similarly by end-users.

A disaggregated approach is unlikely to provide efficiency benefits

54. In principle, prices for telecommunication services deliver a normal economic return to the provider and provide economically efficient signals for provider and access seeker when cost reflective, (i.e. where prices reflect long run marginal costs). In practice however, where there are substantial levels of common costs to be allocated across services, and the functionality actually valued by access seekers and end-users is similar, this outcome is difficult to achieve in practice.
55. For the reasons set out above, efficient regulated prices need to give access providers, access seekers, and ultimately end users price signals which promote economically efficient incentives. Efficient cost based price signals are not always easy to identify for regulated infrastructure firms where they supply a range of services across which there are significant common costs which need to be shared. In a workably competitive market, the interaction of supply and demand

should, in the long run, deliver efficient price signals and enable the full recovery of common costs across the services to which they relate.

56. In regulated markets, regulation substitutes as a means of setting regulated prices in order to provide price signals as close as possible to the long run price signals which would be observable in a workably competitive market. Where there are significant common costs to be shared across a number of services, including one or more regulated services, the requirement to allocate common costs, and particularly the need to use more or less imprecise allocation keys means typically that disaggregated costs are not necessarily efficient, nor necessarily deliver better FPP outcomes.
57. There is no perfect way to allocate these common costs and as a result, in many cases, more or less arbitrary allocation criteria may be adopted in order to achieve a given result. The only absolute criterion of course should be that costs allocated to services should result in prices that fall somewhere between marginal and standalone long run cost of the service. Therefore, it's unlikely that a disaggregated approach (which implies a specific allocation of common costs) will provide more efficient signals than that implied by an aggregated approach.
58. As noted by Dr Every-Palmer, the Commission would need to consider the cherry picking difficulties created by having different prices depending on whether the line is cabinetised (SLU versus UCLL) and other prices are averaged [35]. We agree. A regulatory objective is to set the right signals for investment and consumption, and disaggregation would create incentives that undermines that efficiency. The Commission is obliged to set geographically averaged UBA and UCLL prices (and by virtue of linked in services descriptions in the Act, UCLFS). Setting disaggregated UCLL and SLU prices, while maintaining effectively aggregated UBA and UCLL prices, will result in regulatory arbitrage. RSPs will be expected to optimise between the services.
59. In the short term, RSPs can be expected to optimise between substitute services and levels. This is not due to efficiency reasons, but solely through the regulatory arbitrage. Over time, as set out in our March submission, this will undermine the geographic averaging required by the Act.

While an aggregate approach, in itself, is unlikely to deter unbundling

60. The SLU price is currently set at 60.4% of the UCLL price. While an aggregate approach would result in a single price across both SLU and UCLL, this is unlikely to deter unbundling
61. This is because operators primarily invest to reduce their costs. Therefore, provided the Commission consistently applies aggregation (or disaggregation) across layers 0/1 and 2 regulated services, the incentive to unbundle remains unchanged. As noted by Dr Every-Palmer, it would be difficult to adopt different approaches across related regulated services [35]. The margin available to unbundling access seekers remains the same with or without an aggregated approach.
62. In any case, unbundling by service providers at the cabinet is unlikely to be viable under any scenario. The Commission is required to set an average UBA price all geographic areas, which includes exchange and active cabinet deployed lines. Under these circumstances, where the

UBA price is averaged, it is unlikely to be worthwhile unbundling cabinets with their higher than average costs.

How should the Commission apply its discretion in regard to possible backdating of FPP prices?

63. We do not favour backdating and have set out our rationale for this view in great detail already.
64. We agree with the view expressed in the second opinion that it is within the Commission's discretion to backdate. That discretion should be informed by whether or not backdating is likely to best give effect to section 18. Our view on backdating is set out more fully in our first submission on the Issues Paper.
65. We recognise that the opinion of the Court on backdating could be regarded as obiter and, accordingly, not mandatory for the Commission in this case. The difference between the legislative provisions, the facts in the case, and the outcomes for the market in this case, compared with the *Telecom* case, require that the Commission weigh up the likely impact of backdating separately in each case to understand the effect backdating could have on the market.
66. Legally that appears to be the right approach. There is nothing in the Act that requires backdating as a matter of course, the opinion of the Court of Appeal with regard to backdating was never implemented as that was not a question before the court; and the Court appeared focussed on the principle that a *lower* price would always be more efficient, and in our opinion it was that efficiency improvement that would be the mandatory relevant consideration in the decision to backdate.
67. In this case, our view is that as a matter of principle, whether the price goes up or down, exercising the discretion to backdate should be based on the likely impact on competition and efficiency as referred to by the Court of Appeal.
68. We also agree with the view expressed in the second opinion that the Commission cannot make a final decision on backdating prior to the FPP pricing decision itself. There is no statutory avenue for a separate decision on backdating, independently of the finding on price and the section 18 analysis.
69. We do however recognise that any decision on backdating has the potential to push cumulative costs onto parties and, accordingly, an indication of how the Commission is likely to treat backdating should be set out in the draft decision and any subsequent discussion papers to enable parties to plan and to make provision to the extent possible.

Possible Backdating approaches and a glide path

70. If the Commission completes the FPP price reviews for UBA and UCLL prior to 1 December 2014, as signalled, then backdating only becomes an issue in respect of the charges implemented under the UCLL and UCLFS standard terms determinations – which became effective from 1 December 2012.

71. If however the Commission were delayed in concluding the UBA FPP pricing review beyond 1 December 2014 then there is potential for the UBA price to also be backdated as well to 1 December. This was the date signalled by Parliament as when changes would occur.
72. In practice, cost models will all be aligned at 1 December and it will not be necessary to make adjustments. However, if the Commission were to backdate, as a implementation matter it will need to make an adjustment to ensure that there was no double recovery over the backdate period. The FPP could result in a different demarcation between UCLL and UBA services than that which applied between 2012 and 2014. While UCLL prices can be backdated for the full period, UBA can't. Therefore, without adjustment, the UCLL price could capture functions that for the backdating period were also being recovered through the UBA service. The Act prohibits the double recovery of cost. In which case, the Commission should make an adjustment to backdated prices to avoid this occurring.
73. We generally support glide paths as a means of mitigating the impact of material price change. We would similarly support a glide path here, but only if the FPP resulted in significant price change outside what was signalled in the IPP decisions. Chorus has already had three years to adjust to reduced UBA revenues.
74. We are less certain about the appropriateness of a glide path as a means to claw back past under/over recovery of cost. This is because the glide path is shifting prices between periods, i.e. between past consumers and future consumers.

Other matters

Timetable/process

75. The Commission has indicated that it plans to complete the UCLL and UBA FPP reviews by 1 December 2014.
76. At the time of the UCLL process and issues paper, the Commission anticipated a further round of detailed consultation and a conference on the TSLRIC prior to releasing a draft determination (which would be followed by further consultation and a conference) [22]. The Commission was clear that the process was an indicative guide to be confirmed. Nonetheless, at the time of our February submission on the process and issues paper, we believe the parties anticipated further opportunities to comment on the detailed modelling approach and assumptions ahead of the Commission releasing a draft determination.
77. We now understand that the Commission intends to release modelling requirements and principles papers at the same time as the draft determination. This will be the first time that many of the parties will have visibility of the proposed cost model and key inputs, and therefore places considerable focus on this one short part of the overall process.
78. We expect that the parties will have significantly different views on model inputs and will place significant information before the Commission at this stage under the current process. There is a risk (it may in fact be a strong likelihood) that key inputs may move materially once reviewed by parties. We consider it would be preferable to spread parties' visibility of these inputs and

the model's design parameters (and therefore their comments on it) across several consultation periods, rather than forcing them all into one short period. This will spread workload more smoothly for all, give the Commission and its advisors early visibility of key concerns regarding inputs and/or design, and avoid what looks at this stage as an inevitable need to extend submission and cross-submission times under the current process in response to the weight of information supplied to and by parties.

79. Therefore, we recommend the Commission consider an interim consultation on the model MEA, requirements and principles as well as the Commission's emerging views ahead of setting out its view in the draft determination. The proposed interim consultation is unlikely, in itself, delay the Commission's proposed timetable.
80. We also recommend seeking confirmation from parties now as to whether they intend putting their own cost models before the Commission as part of this process. We have a separate concern that, were any party to produce a second model at submission stage on the draft decision, this would make the cross-submissions period of two weeks manifestly inadequate.

Expiry date clarification

81. We consider that a relatively long period of five years is sufficient before the next price reset, even though the STDs will continue indefinitely. This would give the market sufficient stability to operate under, yet also provide for an appropriate adjustment in due course to reflect changes in the dynamic and enable parties to make appropriate investment decision. A static price of core inputs is less likely to lead to longer term innovation towards more efficient and dynamic services

Confidentiality process

82. We do not support the idea of a section 100 confidentiality order which limits confidential information to the external advisers of parties. That would materially increase costs to parties to make it difficult for us to fully participate in the process.
83. More importantly, the internal resources of Telecom and other service providers are able to efficiently consider and interrogate data and assumptions proposed in various models. Many of these internal people are able to comply with the requirements of confidentiality orders, and/or are not directly involved in commercial decisions. By comparison, access to external resources in New Zealand with the skill set and availability to do the same would likely be very challenging.
84. We therefore support the issuing of a section 100 order but request that the Commission not limit it to external resources and lean on previous processes which have accepted personal undertakings from internal and appropriate skilled legal, economic and modelling personnel.