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Contents

Introduction.....	2
Modelling Approach	3
Modelling Assumptions	4
Network Operating Expenditures	4
TERA's Approach to Network Maintenance Expenditure	6
TERA's Approach to Other Costs	7
Modelling Assumptions for Trenching and Duct Costs	8
WACC Assumptions	9
Asset Beta.....	9
WACC Uplifts	11
Impact of NZ Broadband Competition on Achieving Objectives of the Commission ..	14
Backdating	17
Concluding Remarks	19



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Introduction

The Commission published its draft FPP price determination on the 2nd of December 2014 and asked for submissions from interested parties. As an independent Australian and international fund manager with current investments in New Zealand media, telecommunications and retail, L1 Capital has closely followed the FPP pricing process and is thankful to the Commission for the opportunity to present our views.

L1 Capital strongly agrees with the Commission that by adopting a “stable, well established and internationally orthodox approach to TSLRIC”, the Commission will “support investment incentives”... “which in turn supports competition for the long-term benefit of end-users,” through the “introduction of new and innovative products and services, improvements in the quality of existing products and services, and through lower cost ways of producing existing products.”.

In L1’s opinion a stable, orthodox approach to TSLRIC incorporates two key parameters;

- (a) A **modelling approach** which respects past Commission opinions, current accepted international practice, modern proven network technology solutions and can fundamentally be tied back to the concept of a new efficient network operator making a build decision

- (b) A set of **modelling assumptions** which as the Commission states “reflect the efficient costs of building an equivalent service today” and rewards “efficient investment”. L1 believes this means that assumptions relating to the build cost of the network, the WACC, the operating expenditures and the economic life of the investment should be as close as possible to that faced by a new efficient operator.

The Commission has dedicated significant time, resources and thought in both selecting the modelling approach and making preliminary modelling assumptions under that approach. L1 has studied the draft paper closely and we provide our views below.



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Modelling Approach

We believe the Commission has made prudent choices that reflect the consensus regulatory position, respect the Commission's past decisions and setting a clear framework upon which future regulatory reviews can be made in a predictable manner. In particular we would note that the Commission's decision reflects;

- (a) TSLRIC modelling in a number of countries including Sweden, Denmark, Ireland, Luxemburg and others and have made similar choices in relation to asset re use, optimized replacement costs, quality adjustments, demand take-up etc...
- (b) A rejection of the unorthodox approach by the European Commission for replacement cost which according to Professor Ingo Vogelsang was driven by "specific numerical outcomes", was a break with "classical TSLRIC approach" and "can be seen as interfering with predictability"
- (c) The Commission's past guidance in the 2004 consultation papers which stated "that Optimised Replacement Cost is the appropriate asset valuation methodology for the purposes of any determination that applies TSLRIC as the final pricing principle... and that even if the assets were to be replaced by the same asset, historical costs will not capture the current and future cost of purchasing and installing that equipment"
- (d) The 2013 UCLL Commerce Commission consultation paper which stated that "Forward-looking costs reflect the costs that a network operator would incur if it built a new network today using assets collectively referred to as the modern equivalent asset...the costs of these assets are the costs of currently available equipment"

L1 Capital notes that some have characterised the Commission's modelling approach as being generous. We would note that in almost every instance the Commission's choices reflect the consensus view adopted internationally in implementing TSLRIC. This applies both to modelling choices relating to optimized replacement cost as discussed above as well as choices relating to network demand take-up and migration. In the case of demand take up the Commission considered either a gradual, delayed or immediate demand profile for the new operator and chose approach of "instant take-up of demand on the hypothetical efficient operator's network", "a fully loaded network – 100% demand"; and "constant demand during the regulatory period." This modelling approach has the most adverse effect on derived UCLL price of any of the approach contemplated by the Commission.

L1 believes any judgment on whether the Commission's pricing decision reflects the efficient costs of building an equivalent service today depends on a wholesale assessment of **both** modelling approach and modelling assumptions. We believe on balance the modelling assumptions significantly understate the true costs of an efficient new operator and we explain our reasoning below.



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Modelling Assumptions

As part of the draft FPP price determination the Commission has formed preliminary views on a large number of modelling assumptions. In some cases these assumptions differ materially from what L1 believes would be the commercial realities that a new operator would face in constructing and operating the network. Our views are based on L1's investments in established business such as Chorus, Telstra and SingTel as well as emerging fibre and network infrastructure businesses including Amcom, TPG internet and Vocus where we have observed first-hand the business planning and build decisions that confront an operator such as the one contemplated by the Commission. We set out our views below.

Network Operating Expenditures

One of the most material modelling assumptions is the level of operating expenditures for the efficient new operator. TERA consulting has provided some initial views to the Commission on operating expenditure based on an adjustment of Chorus's costs. L1 Capital strongly disagrees with TERA's approach to modelling operating expenditures and we discuss our reasoning below.

TERA's modelling appears to first adjust Chorus's network maintenance costs for lower line faults that may arise in a fibre network. TERA uses a theoretical benchmark derived by the Irish National Regulatory Authority for Irish conditions and after concluding NZ conditions may be broadly similar lowers the fault rate on the network from 15.8% to 9.9% with a consequent 22% reduction in costs. TERA then makes a 2nd adjustment of a 50% reduction in all expenditure lines based primarily on a marketing non-regulatory strategy presentation by the Italian Regulatory Authority.

TERA's modelling is difficult to compare with the real operating expenditures of Chorus and other telecoms since it does not model expenditures by cost function (i.e. labour, provisioning, network maintenance, IT etc.). It is also fundamentally different to the way a new entrant would model its projected costs since it would similarly build a management forecast of its staff costs, cost of IT infrastructure, cost of rent and premises, etc., to derive an overall cost base for business planning purposes.

Nevertheless we have attempted to model TERA's hypothetical network below against that of Chorus's below to highlight the adjustments made. We have also compared the hypothetical TERA network on an operating cost per line basis against that of Chorus and OpenReach, the functionally separated UK copper and fibre infrastructure provider which provides the closest comparison to Chorus. Please note that it is unclear if TERA has made an additional general 50% efficiency adjustment after making a separate adjustment to reduce the network maintenance costs. To be conservative we have assumed that no double adjustment was made. We have also assumed that all of Chorus's costs were within the scope of the TERA cost model since it is unclear which of Chorus's cost were excluded. To the extent some Chorus costs were excluded this implies an



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even lower allowed cost base for the efficient operator relative to Chorus. Both of these adjustments are conservative and may overstate the level of operating costs modelled by TERA.

Figure 1: Implied TERA Adjustments

Cost Line	Chorus FY14 Costs	TERA network maintenance adjustment	TERA general efficiency adjustment	TERA Implied Cost Base	Explanation of cost item sourced from 2014 Chorus Annual Report
Labour	79		50%	40	Non capitalised staff costs. Excludes all external contractors and service providers.
Provisioning	56		50%	28	New of changed services to retail service providers,. Note this excludes almost all fibre provisioning which is separately capitalised.
Network Maintenance	99	22%	0%	77	Relate to fixing network faults and any operational expenditures arising from proactive management
Other Network	38	22%	0%	30	Service partner contract costs, engineering services, cost of network spares
IT Costs	55		50%	28	IT costs paid directly to 3rd party vendors and Spark shared services. Expected to increase post transition from Spark systems to reflect the costs to support a smaller scale organisation.
Rent	12		50%	6	Costs relating to operation of Chorus exchanges, radio sites and roadside cabinets.
Property	12		50%	6	Costs relating to operation of Chorus exchanges, radio sites and roadside cabinets.
Electricity	13		50%	7	Costs relating to operation of Chorus exchanges, radio sites and roadside cabinets.
Insurance	4		50%	2	Standard corporate cover
Consultants	5		50%	3	Regulatory work and other work
Other	36		50%	18	Non IT shared service costs with Spark as well as advertising, travel, training and legal fees. Non IT costs similarly expected to increase post separation from Spark shared services
Total Costs	409			243	

Figure 2: Comparison of TERA costs with closest peers Chorus and OpenReach

TERA Operating Costs for New Operator		Chorus Operating Expenditures (30/06/14)		OpenReach Operating Expenditures (BT Wholesale as of 31/03/2014)	
Number of Premises Passed (TERA)	1,685,432	Total Lines (30 August 2014)	1,781,000	Total Lines	17,245,298
		Less: Fiber Lines	(42,000)	Wholesale basic analogue internal service rentals	10,090,177
		Total Copper Lines	1,739,000	Wholesale basic external service rentals	2,921,188
Operating Costs(Implied)	243	Opex FY14E	409,000,000	Wholesale premium analogue internal service rentals	2,616,735
				Wholesale premium analogue external	1,617,198
				Operating Expenditures(ex. Depreciation)	3,855,000,000
Opex cost per line	\$ 144.18	Opex cost per line	\$ 229.65	Opex cost per line	\$ 223.54

As can be seen above the level for operating inefficiency implied by TERA relative to two closest real world peers is very high. **According to TERA the efficient new operator will be 59% more efficient on a per line basis than Chorus and 54% more efficient than OpenReach.** The implication is that the new operator will have to achieve 50% reduction in areas such as general staffing costs, IT costs, accommodation costs, rent, insurance and the other cost line which do not have any additional efficiencies for a new fibre operator relative to Chorus. We would also note that the difference between Chorus's costs and TERA's cannot be explained



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through cost of Chorus's fibre roll out program with "UFB communal and 'UBF connections and fibre layer 2' included in fibre capital expenditure being "largely capitalized against the network assets categories of fibre cables and ducts and manholes. " according to the Chorus 2014 Annual Report.

The only way to seemingly justify this level of inefficiency would be to assume that Chorus is operating highly inefficiently today. However the EY report released by New Zealand's Minister for Communications late last year noted that Chorus has "historically shown an ability to implement cost saving initiatives" and that the "ability to implement and achieve revenue increases, cost and capital expenditure savings" from recently announced initiatives "will clearly be challenging." As shareholders we have seen the very significant cost pressures that the recent regulatory IPP draft decision put on Chorus's financial position, with Chorus announcing further costs cuts including a reduction in support staff, cut in all short term incentives, the reduction of proactive maintenance and a new review of service companies in FY14. Chorus's FY14 financial report characterized the extreme capital rationing of the business, stating that current situation has led to "reviewing our entire cost structure and this has required us to focus our limited available cash in areas that deliver short term cash rather than long term outcomes". Finally our own analysis of Chorus and OpenReach costs in relation to the key cost lines of labour, network costs, IT costs, etc... reveal that Chorus and OpenReach operate at a very similar cost structure.

L1 Capital believes that TERA's projected operating costs for an efficient new entrant is unrealistically low given the fixed cost nature of many of the larger cost items (i.e. staff, rent, IT, insurance etc).

TERA's Approach to Network Maintenance Expenditure

TERA's efficiency adjustment for network maintenance costs relies on this statement from the Irish National Regulatory Authority: "ComReg believes it is reasonable and proper to conclude that a maximum LFI of 8% is appropriate given that the modelled network relates to that of an efficient network (based on underground and overhead infrastructure)..." TERA then posits that rainfall, humidity, and wind would be the main factors affecting line fault incidence(LFI) rate difference between NZ and Ireland, highlights that those factors are broadly similar in both countries and therefore adopts close to the Irish LFI rate to reduce maintenance expenditure.

In doing so TERA first ignores that the correlation between LFI and those factors are far from conclusive in the one study by OpenReach it quoted (R^2 of 0.32 to 0.4) and that the more obvious factors responsible for Line Fault Incidence include the amount of overhead versus underground deployment, relative level of redundancy, length of line, etc... As an obvious example the amount of line faults reported by NZ power transmission companies is significantly higher than Chorus's due to the higher level of above ground infrastructure. Given the MEA that TERA has modelled has much 36% of aerial deployment, higher than 2% of Chorus's existing network or 20% Chorus's UFB project you would expect this to be a big factor in increased faults in the MEA network relative to the existing Chorus network even with fibre efficiencies. Given there is a large data set for fibre maintenance expenditure including data from global telecommunications companies that have rolled out fibre networks over the last 5-10 years and have real fault rates, data from NZ power



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transmission companies on line fault rates for overhead deployment, and line fault assumptions from Chorus and LFC's business plans, the analysis that TERA has performed does not seem robust. It also does not model network maintenance costs consistently with the network deployment choices of the MEA network.

TERA's Approach to Other Costs

In making a general efficiency adjustment of 50% of operating expenditures TERA uses as its primary source a 2010 Italian National Regulatory Report presentation. This presentation is 5 years old, appears to be high level a strategy document on next generation networks, and addresses operating costs only in one footnote where it cites marketing claims of 40%-60% of operating expenditure reduction for FTTN networks made by two network equipment manufacturers. It is interesting to note that TERA used the same Italian strategy document in its recent work for the Danish telecommunications regulator where it only advocated a 17% efficiency adjustment using exactly the same arguments versus the 50% applied for NZ. The difference in efficiency adjustment is not explained anywhere in the TERA documents. In the case of operating expenditures there appears to be plenty of real world data available include the operating costs of the seven operating companies identified by Oxera as rolling out next generation networks with little to no legacy copper network. These include AT&T, Belgacom, TeliaSonera, Telenor, Hellenic Telecom. L1 Capital's high level examination of these companies suggest that on a per line basis these companies do not appear to more efficient in relation to staff costs, IT, provisioning, property or other general costs than Chorus. L1 strongly believes that TERA's flawed approach has overstated the operating efficiency of a fibre network and imposed an impossibly high efficiency standard in modelling the new operator.

The Commission has stated that the "efficient operator is a rational, profit maximizing business" and that the Commission's "considerations on operating expenditure are an example where we have drawn on the real world." With all due respect to the Commission we believe the current TERA operating expenditure is far below the real world examples of operating costs for Chorus, OpenReach and fibre companies rolling out new networks. TERA's assumptions are also far below what a rational new operator would model in making its business planning decisions given it would be very aggressive for a new operator to assume a 59% efficiency improvement over Chorus as the efficient incumbent.

L1 Capital believes the integrity of the TSLRIC modelling is severely undermined by the cost assumptions adopted by TERA and there must be a serious re-examination of costs in line with real world data and the network assumptions made under the MEA modelling, including the high level of aerial deployment.



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Modelling Assumptions for Trenching and Duct Costs

Another material driver of the UCLL are the replacement costs of the trenches and ducts to be constructed by the efficient new operator. The Commission has asked Becca to provide advice to the Commission on likely cost of trenches and ducts and its preliminary opinion was published on 2nd December 2014. The limitation of the analysis have largely been acknowledged by Becca itself and are set out below.

Becca highlighted that it did not use either Chorus's or other Local Fibre Company (LFC) fibre trenching costs in its estimates instead relying on "historical pricing data...limited supplier pricing, indicative 'cover all' rates and pricing methodologies from contractors through New Zealand". Becca indicated that "only a small group of contractors were willing to submit quotes". Some contractors were unwilling to provide quotes due to the fact that "every job has its challenges and should be priced individually". The rates that were able to be obtained by Becca were "indicative 'cover all rates" that were available with a "minimum of time commitment" from contractors. Becca also noted that "soil and rock classifications have only been applied to rural areas" and Becca was uncomfortable applying a "specific soil or rock category for urban areas" instead assuming "general completed fill soil of the type used for development".

In relation to local authority consenting costs and traffic management, which Becca described as an "essential part of working within the roading corridors", Becca relied on a 2013 tender in the regional areas of "Kapiti and Horowhenua" and applied these nationally, not making an adjustment for urban areas due to the "conceptual" nature of the estimate. In contrast during the Chorus investor in May 2014, Chorus highlighted some of the challenges in fibre installation in Auckland and Wellington which represent 60% of its UFB deployment area, citing the "volcanic rock type", "hilly" topography with "access challenges" and "narrow roads and complex traffic management".

These differences in soil type, site access and traffic management costs explain the big variance between the theoretical Becca trenching costs and those actually borne by Chorus in Auckland and Wellington as part of the UFB rollout. Becca makes several recommendations at the end of its report to the Commission which highlight the preliminary nature of the estimates including an "assessment of urban areas" to determine if "soil class is considered to have significant impact New Zealand wide", and a "discussion with experienced contractors" around "different communication technologies".

The Commission has access to a large range of commercial data from Chorus and other Local Fibre Companies on fibre trenching and ducting deployment costs across almost all of New Zealand. These costs are current, incorporate the benefit of specific tender information, are specific to each build area and incorporate volume or other discounts where appropriate. Relative to the high level estimate provided by Becca they would be a far more realistic estimate of the cost to build the MEA, even if adjustment have to made for the network deployment choice in the MEA relative to the UFB. There is currently a large gap between the implied cost of the MEA modelled by the Commission and the cost of the MEA modelled by Chorus, part of which may be



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explained by the gap between the Becca trench and duct costs assumed relative to those experienced by Chorus and other LFC's is actually rolling out the network.

L1 Capital believes that the Commission's use of high level Becca estimates have resulted in an under estimation of costs of building the MEA and an under recovery of the true costs of building the network for an efficient new entrant. **Given the large magnitude of the trenching and duct costs there is a high chance that these incorrect costs lead to material errors in the calculation of the FPP UCLL price. L1 Capital strongly believes that Chorus and LFC data should be better incorporated by the Commission to reflect the realistic costs of building the network by allowing Becca access to all third party data where possible.**

WACC Assumptions

Calculation of the appropriate Weighted Average Cost of Capital (WACC) is a key driver of TSLRIC process and UCLL+ UBA price. A WACC that is artificially low does not reflect the true intent of the TSLRIC model. It decreases predictability of TSLRIC, increasing regulatory risk and the risk premia attached to all NZ regulated companies. A low WACC rate also does not support investment incentives and promote competition for the "long-term benefit of end-users" through the "introduction of new and innovative products and services" which appears to be one of the aims of the Commission. Finally a low WACC does not appropriately incentivize the transition of consumers to fibre and thus slows the adoption of services dependent on UFB take up, retarding innovation and conferring a welfare loss on end users.

The draft WACC rate is considerably lower than that used by L1 Capital and other public market investors to value infrastructure and utility companies. It is also lower than the allowable WACC used by ACCC and NZCC for a range of range of regulated utility and infrastructure providers in Australia and NZ. Finally it is lower than the allowable WACC rate of NZ regulated power line companies which L1 believes to be closest regulated entities in NZ, albeit communication assets come with materially higher technology and asset stranding risks.

L1 Capital believes the draft WACC rate is too low to reflect the efficient costs of the new entrant with **asset beta** and the **WACC uplift** allowance being the key areas which have led to an underestimation of the required rate.

Asset Beta

The approach adopted by Oxera in relation to asset beta is to first derive a comparator set and then use a combination of the last two five year periods with greater weight placed on the last 5 year period. In justifying the use of the last 10 years of data, rather than a longer data series available to it and advocated by CEG, Oxera noted that the period from 1994-1999 was affected by the "tech bubble", and the period from 2000-2004 was affected by the "tech wreck" and therefore these periods are not a good indication of forward asset beta. Furthermore, in deciding to put more weight on the most recent 5 year period, Oxera also highlights that the five year period from 2004-2009 is less relevant due to occurrence of the "Global Financial Crisis" in 2008-2009.



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We would note that by focusing on the most recent 5 year period, Oxera has chosen the 5 year period with the lowest average asset beta out of 19 year data series Oxera has presented. In fact between the period 2004-2009 and 2009-2014 monthly asset beta fell from 0.50 to 0.33, a fact that cannot be explained by the two years of the financial crisis in 2008-2009 when asset beta actually declined relative 2004-2008 period. Dr Hird in his analysis highlighted that five year comparator asset betas declined from 0.72 to 0.47 in period 2004 to 2014. Oxera has postulated that the sharp reduction in asset betas may have to with the advent of broadband reducing the threat of mobile competition relative to earlier periods, but given broadband internet was in place in 2004 and certainly in the 2008/2009 period it does not seem a very credible explanation for the decline.

L1 would contend that the 2009-2014 has in every way been as exceptional as the preceding 14 year period considered by Oxera. The Global Financial crises ushered in an extraordinary period of near zero interest rates, extreme liquidity and a chase for global yield as returns on fixed income assets compressed returns. As large, liquid telecommunication companies offering higher than average dividends and predictable revenues, the equities in the Oxera comparator set benefited from a reduction in the required rate of return as investors sought fixed income proxies. As the chart below shows, utilities and telecoms names have greatly outperformed other market sectors in the US and UK since the financial crisis and that performance has accelerated in periods of QE. L1 would contend this chase for yield and the contraction in asset betas is not typical and we should see a reversion to higher risk premia and higher asset betas for Oxera comparator set once global growth normalizes.

Chart 1: US Telecoms (White Line) vs S&P 500(Orange Line) 2009-2014





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The point of the analysis above is not to suggest that the 2009-2014 period should be excluded from the Oxera data set but simply to highlight that every 5 year period is exceptional in some regard with a range of specific factors impacting asset beta. Therefore adopting a larger time period is important to both obtain a richer data set, smooth fluctuations and ensure regulatory predictability from one period to the next. Indeed we believe that in the IM's for electricity and gas companies the Commission did closely examine 20 year asset betas in making its determination for those businesses. As the Commission noted, to "determine whether the change in the sample over time had a material effect on the asset beta for the total sample...those entities with a 20 year full history were looked...the asset beta estimates for the total sample was unaffected". Thus even though the Commission did use 5 year betas as stated in the draft report, this was only after it determined that a longer series would not change the estimate. In the case of the FPP this is clearly not true as a longer series would raise the asset beta materially relative to the current estimate.

The Commission's asset beta of 0.4 is lower than almost every other European regulatory precedent on asset betas as highlighted by Oxera on page 23 of its report. As Oxera notes the range of regulatory determinations is 0.38 to 0.60 with an average determination of 0.47. There is no logical basis for asset betas to differ so materially between NZ and European regulators given the comparators firms are a mix of very similar European and American telecoms and most of the decisions are recent. This reinforces in L1's opinion the fact that the reliance on recent periods has led to an underestimation of asset beta by the Commission. L1 would note that the 20 year period median 5 year asset beta calculated by Oxera on page 14 for its comparator firms is 0.49, which is very close to European average of 0.47.

WACC Uplifts

The Commission has discretion as to whether an uplift should apply to its mid-point WACC estimate of 6.47% for the UCLL and UBA service. The Commission does apply an uplift to the mid-point WACC estimate for electricity line and gas pipeline businesses, but has decided to not apply an uplift to central WACC estimate for the UCLL and UBA service. As we've stated L1 believes that the cumulative effect of the Commission's decisions is to set an artificially low WACC rate which has a range of adverse implications for regulatory certainty, efficient investment and fibre transition. We set out what we understand to be the main reasons the Commission has elected not to apply an uplift and highlighted our views below:

Reason 1: Chorus infrastructure is not as critical as that of electricity or gas businesses and there are redundancies in place which lower the need to mitigate against the risks of underinvestment: "In the Part 4 context, the WACC uplift is intended to mitigate the risks of underinvestment in electricity lines and gas pipeline networks, which will continue to serve consumers for the foreseeable future. However, in the context of UCLL and UBA, UFB is being deployed to replace Chorus' copper network."

L1 View: L1 believes this view confuses the network being modelled. Throughout the draft determination the Commission has modelled an MEA and cost base based on an efficient hypothetical operator. That appeared to be the justification behind the Commission's assumptions on demand take up which assumes "instant take-up of demand on the hypothetical efficient operator's network", "a fully loaded network – 100% demand";



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and “constant demand during the regulatory period.” If the efficient new entrant is assumed to overbuild the Chorus network than the assumptions around demand, WACC, economic life of investment, etc... seem to be inappropriate. Alternatively if the assumption is the modelling of an efficient new incumbent than all the same arguments around underinvestment that apply to electricity and gas companies in Part 4 would apply to the incumbent in our view

Reason 2: The costs to end-users of outages for UCLL and UBA are likely to be significantly less than for electricity lines services

L1 View: L1 believes that the cost of loss of broadband connectivity including interstate connectivity at point of interconnect is likely to be as material as loss of electricity and certainly more meaningful than gas services for which a WACC uplift also applies. The loss of connectivity is likely to impact the banking systems, commerce and the large IT industry in which NZ economy has a leadership position. An estimate for Australia by Telstra found that the loss of internet connectivity would result in productivity losses of \$A 1.2 billion per day with transport, banking, billing, procurement and commerce all affected.

Reason 3: No uplift in WACC is necessary for asset stranding risk and catastrophe risk given the Commission has dealt with these separately.

L1 View: In relation to **catastrophe risk** we would note that in the IM process, the Commission has allowed line companies both to recover the catastrophe insurance costs in the allowable cost base and to apply a WACC uplift. This does not appear to be the approach that the Commission has adopted for this decision.

In relation to **asset stranding risk** the Commission has decided that it can compensate for asset stranding risk by using Chorus’s asset lives with some adjustments by TERA. This is based on the premise that the Chorus accounts incorporate “the likelihood of the asset becoming obsolete as a result of technological advances”. We would note that the statement relating to obsolescence is a general accounting comment relating to the entire asset base and ultimately all asset lives decisions are made by auditors who are not by nature technologists and ask for strong evidence before adjusting asset lives from those adopted conventionally. Thus in the case of active assets like switches, DSLAM, etc the asset lives incorporate some of the issues relating to the short economic life of these assets since auditors have seen a regular pattern of replacement. In the case of underground assets it would be very difficult to convince an auditor to shorten their asset lives due to asset stranding risk and therefore they are carried at their physical lives which is the convention internationally. This can be seen by the 50 year asset lives of underground assets on the Chorus accounts which in no way can be characterized as being adjusted for asset stranding risk given the rapid technology changes which have occurred in telecoms over the last 50 years. As underground assets are a very material part of the overall asset base and, the Commission’s approach has not in effect compensated for asset stranding in its draft decision. An adjustment of underground assets lives to those closer to the economic life of MEA to incorporate asset stranding risk would seem to be the most logical approach the Commission could adopt.



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Reason 4: The modelling approach adopted is already generous preventing the need for a WACC uplift.

L1 View: In deciding against a WACC uplift, the Commission commented that it agreed with “Professor Vogelsang’s advice that an uplift is not warranted, due to our TSLRIC approach and decisions (i.e., not taking into account asset re-use, and not making a performance adjustment for the FTTH modern equivalent asset (MEA)).” In particular it quoted Professor Ingo Vogelsang view that “there be no case to be made for an uplift to the WACC” ... “given generous approach to any other cost components.”

As we commented at the beginning of this submission L1 believes any judgment on whether the Commission’s approach is over generous or otherwise should be based on a view of **both** the modelling approach and the modelling assumptions the Commission adopted.

In the case of the modelling approach we have already commented that the Commission has adopted largely orthodox approach that reflect the majority view of TSLRIC internationally. This applies both to performance adjustments and optimized replacement cost but also applies to demand take up, where the commission has adopted an immediate 100% take up and no loss of demand during the period. This approach to network demand is in contrast to that adopted by other regulators and has an adverse impact on FPP UCLL price. L1 does not believe that just because the Commission did not adopt an approach to asset re-use or ORC advocated by the European Commission which Professor Vogelsang himself stated was driven by “specific numerical outcomes” and was a “break with classical TSLRIC approach”, it is being generous to Chorus.

In relation to modelling assumptions we have highlighted than TERA’s operating expenditure assumptions do not look credible, impose an impossibly high efficiency standard and lead to a situation where a new efficient entrant would not recover their costs. In relation to trenching and ducts we have again illustrated the highly preliminary basis for MEA cost estimates done by Becca and how these are materially lower than the real cost borne by Chorus and LFC’s as they roll out their network. As these are some of the most material estimates in the calculation of the UCLL price and appear to both biased downwards relative to real capital and operating costs faced by a new operator.

Professor Ingo Vogelsang stated in his TSLRIC review the “difference between “efficient on the drawing board” and “actually achievable in reality” could matter” to regulators and that “regulators are usually aware that certain parameter decisions increase or decrease the measured costs against the achievable costs, and they have to use their judgment in balancing those effects, most notably about WACC uplifts”.

This suggest that one approach the Commission could take is to look at the high efficiency standards relative to the WACC applied to the efficient operator and adjust the central WACC estimate if the efficiency standard is unreasonably high.



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Impact of NZ Broadband Competition on Achieving Objectives of the Commission

The Commission, in considering the TSLRIC estimate, has rightly focused on its Section 18 obligations to set a wholesale price that promotes competition for the long term benefit of end-users. In doing so the Commission must weigh the costs of setting a wholesale price that is too high and result in a loss of welfare loss to copper users versus a price that is too low and slows the adoption the migration to fibre services.

L1 Capital believes that in making a judgment about wholesale line prices the Commission must also consider the current level of competitive intensity in the telecommunication market relative to the competitive intensity of a marketplace with significant fibre penetration. After all it is the retail price which is paid by end users and there is no benefit if price decreases set by Commission at the wholesale level benefit only the margins of retail service providers at the retail level. This consideration is particularly important if the current level of competitive intensity is low and the transition to fibre services is likely to increase competitive intensity.

The current fixed line is characterized by a high degree of market concentration with Spark, Vodafone and Callplus under the Slingshot/Orcon brands controlling 90% of the market. The market has consolidated in the last four years with the purchase by Vodafone of TelstraClear and the merger of Slingshot/Orcon brands. Following the 2nd of December draft determination, the wholesale monthly line charge fell from \$43.98 to \$38.39, a saving of \$5.59 for retail service providers, but a lower level of savings than under the IPP price. As a result Spark, Vodafone and Callplus have all raised prices on their broadband plans by circa \$4, with Spark first signalling an intention to raise prices in December 2014 and Vodafone following in January 2015. In the case of Vodafone prices went up on a range of telecommunication products unaffected by the ruling. Both InternetNZ and TUANZ highlighted that a degree of price signalling appeared to be in place in the industry with TUANZ Chief executive Craig Young “yet to be convinced” that price rises were necessary. Below we present the product margins for a \$99 plan before and after the draft decision which show the margin expansion following the price and lower wholesale charges.

We also present modelling from First NZ Capital showing current and projected ARPU and input costs trends in Spark’s fixed line business. Both of these tables illustrate that majority of wholesale price decreases were captured by retail service providers and the competitive intensity appears low.



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Exhibit 1: Product Margins for \$99/\$103 retail plan

Under IPP Price	Unit	\$99 Plan	Comment	Current Profitability	Unit	\$103 Plan	Comment
Price	\$	99.00		Price	\$	103.00	
Less GST (15% tax)	\$	14.85		Less GST (15% tax)	\$	15.45	
Net price	\$	84.15		Net price	\$	87.55	
Inputs				Inputs			
UBA/UCLL	\$	44.98		UBA/UCLL	\$	38.39	
International Bandwidth	\$	10.00	c\$10 on \$99 plan	International Bandwidth	\$	10.00	c\$10 on \$99 plan
Core network	\$	3.00	Backhaul, POI, etc	Core network	\$	3.00	Backhaul, POI, etc
Install costs	\$	1.00	Amortised over 3yrs customer life	Install costs	\$	1.00	Amortised over 3yrs customer life
Modem	\$	3.00	Amortised over 3yrs customer life	Modem	\$	3.00	Amortised over 3yrs customer life
Costs pre cost to serve	\$	61.98		Costs pre cost to serve	\$	55.39	
Contribution margin	\$	22.17		Contribution margin	\$	32.16	
Contribution margin	%	22.39		Contribution margin	%	31.22	
Advertising	\$	5	?	Advertising	\$	5	?
Cost to support	\$	7.5	c\$5-10 per call, Philippine call centre	Cost to support	\$	7.5	c\$5-10 per call, Philippine call centre
Margin post cost to serve	\$	9.67		Margin post cost to serve	\$	19.66	
Calling Plan				Calling Plan			
Margin	\$	8	Between \$8-9 per month	Margin	\$	8	Between \$8-9 per month
Margin	%	60	Very little costs, VolP	Margin	%	60	Very little costs, VolP
Margin	\$	4.8		Margin	\$	4.8	
Summary				Summary			
Revenue	\$	107.00		Revenue	\$	111.00	
GST	\$	14.85		GST	\$	15.45	
Inputs	\$	61.98		Inputs	\$	55.39	
Cost to serve	\$	12.5		Cost to serve	\$	12.5	
Calling	\$	3.2		Calling	\$	3.2	
total	\$	92.53		total	\$	86.54	
PBT	\$	14.47		PBT	\$	24.46	
Margin	%	13.5		Margin	%	22.0	

Exhibit 2: Spark Telecom Broadband ARPU and Input Costs 2012A-2016F

Spark Telecom	FY12A	FY13A	FY14A	FY15F	FY16F
Revenues	FY12A	FY13A	FY14A	FY15F	FY16F
Broadband connections (000's)	619	649	669	685	695
Broadband ARPU	\$80	\$78	\$77	\$80	\$82
Input Costs	FY12A	FY13A	FY14A	FY15F	FY16F
UCLL input price	\$24.46	\$23.99	\$23.52	\$23.52	\$28.22
UBA input price	\$21.46	\$21.46	\$21.46	\$16.19	\$10.17
Total Price	\$45.9	\$45.5	\$45.0	\$39.7	\$38.4

Source: First NZ Capital Spark New Zealand Initiation Report: 10 Feb 2015

Author: Arie Dekker. FY16E input costs changed to reflect commission draft prices



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The Commission does not have the regulatory power to set prices at the consumer level. However by setting a wholesale prices appropriately it can put in place economic incentives for consumers to switch more rapidly to fibre services. This will have the advantage of driving critical scale for both new fibre retail service providers and innovative new services such as e-health, tele-presence and others.

Setting wholesale prices appropriately will in all likelihood increase competitive customer churn in the industry as many consumer consider fibre services for the first time. Already new fibre only business such as My Republic has started based on the fibre opportunity and with the completion of UFB network companies such as SkyTV, TradeMe, as well power transmission and gas companies may all become new potential RSP competitors. These companies will be attracted to compete by the large customer migration opportunity from copper, the ability to bundle their existing offers with broadband services to reduce churn and increase loyalty, and the synergies from being able to use their existing billing and customer service platforms. These potential fibre entrants are currently locked out of the copper markets due to need to support many legacy product types, low level of churn driving high cost of acquisition, and the need for incremental technical infrastructure.

L1 believes that by setting wholesale prices which drive fibre adoption, the Commission may create increased competitive tension in the telecommunications market, resulting in lower retail prices than under current market structure. The adoption of fibre products will drive widespread adoption of next generation fibre services further increasing benefit to end users.



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Backdating

The Commission has published an emerging view on UCLL and UBA backdating with a preliminary indication that the price be backdated to 1 December 2014.

L1 Capital believes that this decision runs counter to Commission precedent, is not in line with recent with High Court decisions or the 2006 Court of Appeals verdict and most importantly does not benefit end users. Our arguments are below.

Draft backdating view is counter to Commission Precedent on UCLFS Pricing and Commission's position during 2006 Court of Appeal review.

The Commission's decided in April 2014 to lower the price of UCLFS service and backdate the charges, with interest, to December 2012. The decision is expected to impact Chorus's earnings by \$6m in EBITDA. We would note that the Telecommunications Act requires the UCLFS price to the same as the UCLL price. The Commission set the UCLFS charges in November 2011, and stated at the time that when the UCLL pricing review was complete it would backdate the charges. It's hard to understand why the same principles would not apply to the UCLL price. The Commission's emerging view is also counter to Court of Appeal case "Telecom New Zealand Limited v Commerce Commission and Telstra Clear" in which the Commission argued persuasively for a backdating of the final price determination.

Draft backdating view is counter to both 2006 Court of Appeal decision and the recent High Court decision on UBA.

In the 2006 Telecom vs Commerce Commission decision, the Court of Appeal held that a price review determination relates back to the date of the initial determination. Specifically the Court of Appeal stated that the purpose under s18 of the Telecommunications Act was better served by substituting the revised price for the initial price rather than only after a period of relatively less efficient pricing. Again it is hard to see how this is not a strong legal precedent for the Commission to consider. The recent High Court case about UBA also seems to confirm as much, particularly the judge's reference to benchmarking being "quick and cheap".

Emerging view damages investment incentives and does not benefit end users

The Commission's view on backdating will decrease regulatory predictability and hinder efficient investment which goes against one of the key aims of the Commission. Specifically, it will introduce uncertainty as to whether the backdating decision will consistently be applied, raising the risk premium for regulated telecoms and for all regulated utilities. It will hinder investment in regulated new services as Chorus will be highly reluctant to invest without certainty that the final regulated price needed to recover its costs will apply to the whole regulatory period. It will introduce an adverse incentive for Retail Service Providers to delay the regulatory process as long as possible between the interim and final price in future regulatory decisions to capture benefit of a lower interim price. None of these impacts benefit end users.



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Backdating and competition in the broadband market

One concern which the Commission has called out is whether a backdating decision could cause a firm to exit the market and lessen competition.

The Commission’s view of backdating will result in a lower, less accurate price being charged by Chorus to the Retail Service Providers (RSP’s) for a period of 2 years from December 2012 to December 2014. As 90% of the broadband market is controlled by Spark, Telecom and Slingshot/Orcon it is worth looking at the relative financial health of each of these businesses.

	Market Capitalisation	EBITDA	Dividend Paid	Stock Buybacks	Total Shareholder Returns	Net Debt	Net Debt/EBITDA	Broadband Market
	19/02/2015	2014A	2013-2014	2013-2014	2013-2014	2014A	2014A	Share
	\$NZD m	\$NZD m	\$NZD m	\$NZD m	\$NZD m	\$NZD m		Approx.
Spark NZ	6,566	936	602	282	884		0.55x	50%
Vodafone NZ(1)	120,000	700	150	0	150	n/a	1.10x	30%
Slingshot/Orcon	n/a	n/a	n/a	n/a	n/a		n/a	10%
Chorus	1,148	649	0	0	0	1800	2.70x	n/a
Note:	Vodafone Market capitalisation relates to parent group VOD.L							

Clearly Spark and Vodafone are well capitalized corporate entities with more than sufficient balance sheet capacity to fund a backdated payment through cash reserves or debt in a single payment. This will not impact their solvency and should have no impact on market pricing. Both of these entities have paid substantial distribution to their shareholders, partly as a result of windfall gains they have received through artificially low IPP UCLL price. Conversely Chorus shareholders have had dividends suspended as a result of the lower IPP price, and cut back all discretionary capital expenditure, impacting the roll out of innovative incremental investment for the benefit of all users. This is evident from 2014 Chorus Annual report which stated that the company has focused “our limited available cash in areas that deliver short term cash rather than long term outcomes”.

It is clear that in the case of Spark and Vodafone payments the Commission’s decision would simply transfer circa \$150m from Chorus shareholders to Spark and Vodafone shareholders, with no demonstrated benefit for end users and while decreasing regulatory predictability. Additionally we would note that Spark has made the claim that the benefits of the IPP price have been passed on to consumers, in particular, through the dropping of prices on broadband basic plans from \$105 to \$75 in December 2012 following IPP decision. In fact Spark first announced its new price plans in October 2012, two months before IPP decision, following merger of Vodafone and Telstra Clear, and the new plans were a simply a response of its uncompetitive broadband offers at the time.



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In the case of Orcon there is clearly more ambiguity around the financial health of the operator and its financial capacity to make a lump sum backdated payment. As a third largest operator Callplus/Orcon will already have smaller operating margins than that of Vodafone and Spark and may not have the advantage of large standby credit facilities. The business may also be funded with significant debt as a result of the recent merger of Callplus/Orcon which adds financial leverage to its already significant operating leverage. We believe in this instance a smoothed payment profile over many periods may be the most appropriate way to respect the backdating principle while ensuring the viability of the third player in an already highly concentrated marketplace

Concluding Remarks

We believe the Commission has applied significant intellectual rigour to the complex task of TSLRIC modelling and provided a detailed modelling framework where the key assumptions can now be vigorously debated. In L1's view the draft modelling choices adopted by the Commission have the effect of significantly underestimating the efficient costs of building an equivalent service today. This has significantly heightened "asymmetric risk" with efficient operator's returns likely to be truncated at level where its efficient capital cost could not be recovered. Without sufficient investment signals it is likely that Chorus will continue to be capital starved and not pursue incremental investment in the existing copper network.

Additionally by setting an artificially lower price signal for copper inputs the Commission will retard the take up of fibre services. Without critical scale it is likely that many of the innovative services which rely on fibre inputs will either be delayed or not be able to start at all. As importantly, an artificially low copper input price will also lower competitive churn and now allow any number of new retail service providers who may be attracted by the fibre migration opportunities to build critical scale. Given the high level of concentration in retail broadband markets, new entrants may be the best opportunity for the Commission to lower retail prices and deliver better value to end users. In all these respects a low UCLL price will ultimately harm end users. We thank the Commission for the opportunity to make this submission and look forward to engaging further in the process.

Signed:

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