



**SCHEDULE 3 INVESTIGATION INTO
REGULATION OF MOBILE TERMINATION
ACCESS SERVICES**

**SUBMISSION ON DRAFT REPORT
PUBLIC VERSION**

28 July 2009

CONTENTS

EXECUTIVE SUMMARY	3
Telecom has submitted revised Undertaking	3
There are a number of concerning and fundamental errors in the Commission's analysis	3
Further opportunities to submit an undertaking.....	6
BACKGROUND.....	7
INTRODUCTION – THIS IS A COMPETITIVE MARKET	7
THE COMMISSION'S COMPETITION TEST	10
Two-sided markets	10
Why marginal cost analysis is the not the right approach	12
Factors affecting the competition test that should be applied	13
MTRs balance platform participation across networks	13
Incremental cost analysis has a different relevance in two-sided markets.....	14
Price elasticities for demand on both sides of the market.....	14
Implications of continuing with LRIC as the competition test.....	15
Competition test that should be applied	16
Summary	17
Market expansion with MTRs above cost.....	17
THE LRIC COST STANDARD.....	18
<i>Marginal cost alone insufficient in two-sided markets</i>	18
Appropriate cost methodology.....	19
Differential termination rates	20
GLIDEPATH	21
THE COST BENEFIT ANALYSIS	22
The counterfactual and factual	22
CBA is incomplete	22
Quantification of transfers and section 18 of the Telecommunications Act.....	23
Vertical price squeeze	23
Waterbed effect	24
Pass-through	25
FTM elasticity estimate is likely to be too high.....	25
A REVISED UNDERTAKING	26
New MTRs prices	26
Handover of traffic	27
Further opportunities to amend undertakings.....	27

EXECUTIVE SUMMARY

- 1 The mobile sector in New Zealand is characterised by high levels of investment, world-leading technology and networks, product and service innovation, and recently, new entry. In the middle of the most challenging economic times of our generation, the mobile sector is a standout success.
- 2 At the same time, mobile termination rates (**MTRs**), mobile retail prices and fixed to mobile retail prices are all declining rapidly while usage volumes are increasing – all without regulatory intervention. MTRs have fallen by over 46% in the last five years alone, and Telecom’s revised Undertaking will see an even greater level of reduction - 53% - over the next five years. In this context, it is difficult to understand how any case for regulation can now be made.
- 3 A fundamental principle of best practice regulation is that regulation should only be imposed as a last resort where there is a market failure, and even then, only when there is clear evidence that it would result in a material net benefit to end-users in the long run.
- 4 The Commission itself acknowledges that regulation will result in higher mobile retail prices and that this will result in approximately 130,000 mobile subscribers dropping off the network. Interventions of this sort, and with these sorts of expected consequences, should not be imposed lightly. The more measured approach put forward in our revised Undertaking, of significant reductions in MTRs implemented over time, with rates that leverage off the work already done by the ACCC in Australia to calculate the efficient level for MTRs, should be preferred.

Telecom has submitted revised Undertaking

- 5 The Undertaking Telecom is submitting with this submission is based on the current regulated MTR set in Australia by the ACCC (A9cpm). The Commission’s analysis and cost benefit analysis (**CBA**) is sensitive to a number of assumptions which are open to debate, and present no clear case for regulation. With only moderate amendments to the CBA, for example, the significant MTR reductions proposed in our revised Undertaking can be shown to be far preferable to regulation. If the Commission should conclude that regulated MTRs are warranted, our revised Undertaking represents a far more measured approach to MTR reductions, which better mitigates the adjustment problems likely to be experienced both by operators and end users from sudden changes in MTRs.

There are a number of concerning and fundamental errors in the Commission’s analysis

- 6 The international benchmarking, CBA and market and competition analysis relied on by the Commission to support its draft recommendation (**Draft**

Recommendation) that regulation should be imposed fails to meet the standard to justify regulation set out above, and all contain concerning methodological errors that call much of the Commission's conclusions into question.

The CBA covers only one of the four services being investigated

- 7 While the Commission's Draft Recommendation considers regulation of four termination services (Fixed to Mobile (**FTM**), Mobile to Mobile (**MTM**), International to Mobile (**ITM**) and SMS) its CBA considers only regulation of FTM – there is no CBA done for any of the other services.

The international benchmarking undertaken does not reflect actual market prices and is inconsistent with the Commission's own proposed regulation

- 8 The benchmarking undertaken by the Commission fails to meet the very benchmarking standard it proposes for the regulated service. The Commission proposes that regulated MTRs should initially be set by benchmarking against "...prices in comparable countries..." and then by calculation of a TSLRIC model. Despite this, the benchmarking included in the Draft Recommendation considers only hypothetical cost modelling done by regulators overseas, which ignores the actual prices set in the market by those regulators (which differ to the hypothetical model results) and is in some cases based on a forward-looking LRIC calculation rather than a TSLRIC calculation. It is extremely rare internationally for any regulator to impose a purely hypothetical forward-looking LRIC price that is unattainable in the real world. The Commission has provided no substantive justification for why this approach would be reasonable or sensible in New Zealand.

The calculation of the waterbed effect is flawed

- 9 The Commission acknowledges in its Draft Recommendation that regulation of MTRs will result in a rebalancing of retail mobile prices – the "waterbed effect" – and that the size of any waterbed effect is related to the level of competition in the market. However, in its CBA, the Commission assumes that the waterbed effect is constant over time, even though it assumes for other purposes that competition will increase.

The calculation of FTM and MTM elasticities is flawed

- 10 The Commission assumes elasticities for FTM and MTM calling which are unsupported by its own empirical evidence. When the elasticities are corrected to reflect the empirical evidence collected by the Commission, this alone is enough to reverse the conclusions of the Commission's CBA.

There is limited consideration of dynamic efficiencies

11 Despite recognising the vigorous dynamic competition evident in the mobile services market, which is characterised by the extremely high levels of 3G coverage (two operators at 97%) in New Zealand, the Commission's CBA is a largely static analysis only. There is a substantial body of evidence in economics literature that finds that what really matters for maximising long-term social welfare is dynamic efficiency: efficiency in investment and innovation into the foreseeable future. The lack of any meaningful consideration by the Commission of the potentially significant costs regulation could impose if it reduces dynamic efficiency is troubling.

The Competition Analysis does not reflect the nature of the market

12 While the Commission acknowledges that the relevant markets are two-sided, its competition analysis is largely one-sided. The main reason given by the Commission for concluding that regulation is warranted is that there is a competition issue because MTRs are above marginal cost. Such an analysis might be appropriate in a one-sided market, but is not determinative of anything in a two-sided market, where the price structure required to ensure an appropriate balance between customers on either side of the market and optimise usage of the relevant platform is usually asymmetric, and with prices on one side of the market substantially above those on the other side.

13 The implication of the Commission's proposed approach in these circumstances is that the regulation proposed by the Commission can only:

- (a) Substitute one form of market structure and competition (based on innovation and coverage) for another (price based)¹; and/or
- (b) Transfer wealth from one set of consumers to another.

14 In summary, the Commission should reconsider its competition analysis in light of the two-sided markets and dynamic competition occurring across geographic coverage, services and pricing dimensions. We believe that the market is competitive when viewed across these dimensions and that there is therefore no need for further regulation.

15 Should the Commission conclude otherwise, the Commission must carry out a CBA that covers all four services being considered. Further, the factual scenarios must take into account expectations around proposed regulatory pricing principles. Also, the counterfactual should be based on the current MTR Deed agreed between Telecom and the Crown.

16 Attached is a report by NERA Economic Consulting (**NERA**) which makes a number of further points in relation to the Commission's proposed IPP and benchmarking approach.

¹ This point is discussed in the attached NERA report in section 2. The key finding which is reinforced is that it is dynamic competition which provides greater benefits to end-users in comparison to static competition.

Further opportunities to submit an undertaking

- 17 In paragraph 20 of the Draft Recommendation the Commission stresses that its preliminary view is that it would be unlikely to allow further opportunities for revised undertakings to be submitted after the conference unless substantive issues are raised in submissions that impact on the Commission's assessment of the undertakings.
- 18 It is important that parties are able to update undertakings later in the process as additional information comes to light, particularly given the issues identified with the current CBA. We would also support a workshop to explore opportunities for greater alignment on the undertakings proposed by all Access Providers.

BACKGROUND

- 19 On 6 November 2008 the Commission announced its decision to investigate:
- (a) MTM voice termination;
 - (b) FTM voice termination; and
 - (c) SMS termination.
- 20 On 12 January 2009 Telecom submitted its initial undertaking covering all three aspects of the MTAS Investigation under Schedule 3A of the Act. Undertakings were also submitted by Vodafone and 2 Degrees.
- 21 The Commission provided Telecom, Vodafone and 2 Degrees with comments to consider in submitting revised undertakings in relation to the relevant MTAS services. The Commission commented that any revised undertakings were required to be submitted by 22 April 2009 and that these would be the final undertakings considered for recommendation of acceptance by the Commission. The deadline was later extended to 6 May 2009.
- 22 The Commission subsequently entered into correspondence with Telecom and Vodafone in relation to procedural matters concerning the MTAS Investigation and agreed to consider further revised undertakings after the release of the draft report.
- 23 On 6 May 2009 Telecom submitted an amended undertaking and supporting submission.
- 24 On 30 June 2009 the Commission released the Draft Recommendation. This is our response to that Draft Recommendation.

INTRODUCTION – THIS IS A COMPETITIVE MARKET

- 25 A key principle of good regulatory practice is that regulation should only be implemented where there is evidence of market failure. Even then, regulation should only be imposed to the minimum extent required and where the benefits of doing so clearly outweigh the costs of regulation. The Commission has not clearly demonstrated the justification for its preliminary decision to regulate the four services² that are currently under investigation.
- 26 Telecom has a world-class network which is the result of substantial investment. Significant ongoing capital expenditure is required to continue growing that network and to expand coverage further.
- 27 Over time we have continued to invest to provide better services to customers, building several generations of cellular network, each of which has cost many hundreds of millions of dollars. Telecom has evolved from AMPS to DAMPS to

² Being MTM, FTM, IMT and SMS.

investment that has been made by Telecom and Vodafone. 2 Degrees may choose to make a price play, but its service should reflect what can be delivered at such prices.

30 The market is clearly competitive and appears to be delivering on the Government's policy objectives - competition is based on innovation and investment in a critical area of New Zealand infrastructure. Mobile operators have chosen to compete by offering high quality services rather than focusing on price alone.

31 We also note that in the Commission's discussion of the standard of workable competition in its recently released discussion paper on Input Methodologies, there is an acknowledgement that prices will not be at marginal cost in competitive markets all of the time. Indeed, increases in prices above marginal cost over the short term can increase the dynamic efficiencies in a market:

Under workable competition, the incentive for firms to improve efficiency and actively seek out opportunities for innovation is provided by the potential to earn a positive economic profit. So while profits will tend toward normal economic returns over time, they ought to be sufficient to cover efficiently incurred costs and reward innovation, prudent investment and efficiency gains....⁶

....Likewise, just because a firm is earning more than a normal return in the short term does not necessarily mean that those higher returns are all so-called 'functionless' monopoly rents (i.e., profits that are not associated with promoting efficiency). As the High Court has observed, supra-normal profits that arise from cost savings or innovation are not considered functionless. Greater profit levels may actually reflect temporarily superior performance in terms of productive and/or dynamic efficiency improvements.⁷

32 The Commission cannot ignore the recent investment in the sector and competition in the sector on issues such as coverage and services. The fact that in the first two months of Telecom's XT network being live, approximately 100,000 customers have shifted onto this network is practical evidence that the offerings based around this network are attractive to consumers, and are an example of dynamic competition in action. Similarly, the announcement that the XT network coverage would reach 97% of users provoked a competitive response from Vodafone who we understand brought forward the timing of its roll-out in order to be able to match the coverage offering. Given these practical examples of dynamic competition in action the Commission's focus on price only and at this point in time, and ignoring the dynamics of a two-sided market does not answer the question as to whether there is workable competition.

⁶ See paragraph 2.32 Input Methodologies Discussion Paper.

⁷ See paragraph 2.34 Input Methodologies Discussion Paper.

- 33 In paragraph 2.1.2 of the attached NERA report, data compiled from the OECD Communications Outlook demonstrates that New Zealand mobile network operators are not making significant revenues per customer when compared with their OECD counterparts. This should be considered in the light of the continuing level of investment in network coverage and capability by all mobile network operators. The emphasis by the Commission on MTRs and its view of price based competition does not take full account of the level of price and non-price competition in the market, and the need to price market offerings that recover cost.
- 34 We also note that the same Input Methodologies Paper cites *Fisher & Paykel Ltd v Commerce Commission* [1990] 2NZLR 371 as providing the test for workable competition:
- Workable competition exists when there is an opportunity for sufficient influences to exist in any one market which must be taken into account by each participant, and which constrain its behaviour.
- 35 The Commission does not appear to have considered this statement in the context of the intense rivalry between Telecom and Vodafone, the new entry by 2 Degrees, the emergence of MVNOs on both networks and continuous changes to the sector such as the launch of the new XT network, the fact that prices are diminishing over time and the existing MTR Deed on rates offered at the wholesale level.

THE COMMISSION'S COMPETITION TEST

- 36 The Commission's approach to competition in the Draft Recommendation is based - on the face of it - on a belief that MTRs are priced above incremental cost. However, as set out above, there are a number of indicators that suggest the market is competitive and, even in workably competitive markets, the price for some services will depart from definitions of cost.
- 37 In the case of mobile sector, in particular, the level of shared costs across services and existence of a two-sided market means that Commission should be particularly cautious before concluding that a competition problem exists.

Two-sided markets

- 38 The Commission's competition test concludes that there is a competition issue in the relevant retail markets based largely on the fact that it concludes that MTRs are above marginal cost.⁸ We explain below why this conclusion is incorrect.
- 39 The Commission acknowledges in the Draft Recommendation that there is a product market for the supply of mobile termination access services and that market is two-sided⁹. At paragraph 131 of the Draft Recommendation the Commission further notes that the two-sided nature of the market does not imply

⁸ See paragraphs xiv and xv and also paragraph xix of the Executive Summary.

⁹ At paragraph 134.

that mobile network operators are constrained when setting prices for termination on their networks. For the reasons set out below, this statement is not correct.

- 40 As the Commission is aware, a typical television channel is a simple example of a two sided market. The television channel will target two distinct groups of customers; advertisers and viewers. The channel provides access for viewers to a range of entertainment and educational content. The audience of viewers attracted by the content will get to watch the channel without charge. Provided a sufficiently large audience is attracted, they are used to attract advertisers who are prepared to pay the costs of operating the channel. That is to say audiences exert an indirect network effect on advertisers. The channel operator's revenues are however constrained by the preferences of audiences, first as to payment, and second as to the level of advertising content they will accept. On the other side the operator is constrained by the readiness of advertisers to pay for access to the audience pool. The elasticities of demand on both sides of the market, particularly in the presence of competing channels, will limit the revenue available to the television channel operator. In order to optimise its return, the television channel operator must balance the indirect network effects between the two sides of the market.
- 41 This is an efficient market model because it will maximise the number of viewers and the advertisers will benefit from the effect in the increase in the number of viewers. In the television channel scenario it would clearly be inappropriate to analyse either the viewer market or the advertiser market on a stand alone basis because of the two sided nature of the market. Cost-based regulation of this situation would give rise to absurd outcomes. The idea of cost-based regulation relies on a model of a vertically organised market, characterised by the value chain, in which an entity supplies a good or service to a downstream entity which supplies the end-user. In the two-sided market, the market participants on either side are linked by interdependencies.

Two-sided markets – the network platform

- 42 The illustration of the television channel reflects a two-sided market in which a firm provides a network platform which enables two (or more) groups of customers to transact with each other. A key feature of this platform is that there is an indirect network effect – the participation in the platform by one set of customers raises the value of participation for the other group. The platform typically consists of two elements; the architecture and the contractual relations. The architecture can be understood as the design and provision of the infrastructure by which the products and services required to facilitate transactions are deployed. In the case of mobile telecommunications this is of course the network and handset deployment. The contractual relations refer to the rights, obligations, prices, terms, and conditions of trade that govern the transactions between both groups of customers and the platform.

- 43 Value is created in this network configuration by pricing access to the platform in such a way that the two groups of customers are brought together so that the interdependence of demand is maximised. This means balancing the level of demand and interests of customers on each side and ensuring that the use of the platform increases value to both sets of customers. Competition is based not merely on price structures which enable this, but on a range of non-price features, functionality and incentives to attract customers. A key component of this in mobile telecommunications is interconnectivity between competing platforms, which benefits all parties.
- 44 Although two-sided markets have existed throughout history, and have also been of significant economic importance, regulatory policy and economic analysis has until recently been largely directed at one-sided markets. Since much of the recent work in this area post-dates the development of competition regulation policy, it is understandable that the familiar tools which have worked well in the context of one-sided markets tend to be applied first, and to frame the analysis and debate which follows. It continues to be the case internationally, both in general and particularly in the context of mobile telecommunications, that the importance of the differences between one and two-sided markets, and the vital importance of the need for correct analysis have been poorly understood.
- 45 However, in this investigation, the Commission's approach is to consider each side of the market separately by applying the regulatory policy tools more appropriate to a single-sided market, severing mobile termination access services from the retail supply of mobile services, including mobile subscription and mobile origination. This does not take into account the true nature of the two-sided market – namely the interdependence between the two sides.¹⁰

Why marginal cost analysis is the not the right approach

- 46 The Commission's approach in the Draft Recommendation is to focus on the fact that MTRs may be above marginal cost, observe the approach taken by other regulators, and then justify intervention on the basis that there are competition problems. The justification required to support the decision uses the traditional tools of regulatory policy, without fully accounting for the specific issues which are relevant to the mobile telecommunications market.
- 47 In a two-sided market there should be no expectation that price will equal cost on any one side. Since the price structure required in a two-sided market is not related solely to cost, as illustrated by the example of the television operator set out above, there is no necessary linkage between marginal costs and price structure. Termination rates in mobile telecommunications will be set by

¹⁰ The Commission has been exposed to the practical issues related to two-sided markets in the past. Although these have occurred in the context of mergers and acquisitions the lessons for market and competition analysis are relevant to the regulation of telecommunications. Examples include *Fairfax New Zealand and Times Media Group*, Decision 561, October 14 2005, *Sky Network Television Ltd and Prime Television New Zealand Ltd*, Decision 573, February 8 2006, *CanWest Radioworks Ltd and Radio FM Licences in Northland*, Decision 557, August 31 2005 and *Fairfax New Zealand and TradeMe*, Press Release 123, issued April 20 2006. It is also worth noting that in a speech to the Fifth Annual Mergers and Acquisitions Summit on March 6 2006, the then chair of the Commission, Paula Rebstock acknowledged when discussing the Commission's Merger and Acquisition Guidelines that two-sided markets "may necessitate a slightly different approach in some markets" - a shift from its earlier view that two-sided market analysis did not require a any difference in approach to its published guidelines.

competition at rates required to recover a share of marginal cost and a share of common costs within the context of providing a platform in the two-sided mobile telecommunications market.

- 48 Competition in the mobile telecommunications mean that additional revenue is used to grow access - as can be seen by Telecom's substantial subsidy for handsets, investment in backhaul fibre and wide 3G coverage. The coverage battle with Vodafone has seen unusually high 3G coverage delivered in New Zealand. The result of this is very high fixed costs, even though the marginal costs can be quite low because the networks are 3G.

Factors affecting the competition test that should be applied

- 49 In considering the appropriate competition test to be applied, the Commission must keep in mind that mobile telecommunications markets are not only two-sided, but are best viewed as cluster markets. In fact, end users purchase and use mobile telephones for many reasons and customer profiles are very varied. An overly narrow definition of the market for regulatory purposes requires the Commission to consider and define a large number of superfluous markets.
- 50 The implication is that a mobile network operator is best seen as a multi-product firm. Customers require not merely one or more handsets and activation (i.e. a SIM), but also connectivity. End-user demand is served by a range of bundled products and services, pre-pay or post-pay, and the selection of plans which suit anticipated calling profiles, patterns and circles.
- 51 As emphasised above, the other key consideration which the Commission must take into account is that socially optimal prices in two-sided markets depend on a range of factors including marginal costs on both sides of the market, inter-group network effects and price elasticities of demand on both sides of the market.

MTRs balance platform participation across networks

- 52 MTRs are not a fee for interconnection service in a two-sided market. Instead, they operate to ensure the efficient operation of the two-sided market by balancing the demands of the two types of user; the calling and receiving parties respectively. The Commission's concern is that the MTR could be set at a level above the economically efficient level.
- 53 In the two-sided mobile telecommunications market, network operators seek to optimise value across both sides of the market, both within their own network and across networks. This feedback effect operates as an effective constraint on the ability of network operators to set MTRs above or below efficient levels. The balancing effect will mean that no party has sufficient market power to set the MTR above an efficient level. This analysis provides a more principled basis for competition assessment in the two-sided market situation presented by mobile telecommunications.

Incremental cost analysis has a different relevance in two-sided markets

- 54 In a two-sided market such as mobile telecommunications, prices do not, and cannot follow costs in each side of the market. In effect, the structure of prices rather than the relationship of price to marginal cost is what matters. An efficient price structure should take into account not only the relative costs but basic market conditions such as consumer preference on both sides of the market.
- 55 Within each network, the level of the MTR does not simply translate to increased profits for the mobile network operator. It reduces the marginal cost of the mobile network operator and correspondingly reduces the overall prices charged to end-users. The revenues to each network from MTRs flow through directly to end-users by way of reductions in the prices paid, or indirectly, in a competitive market, through the benefits of non-price competition by way of increased coverage, network features, and speed.
- 56 Accordingly, it is incorrect to conclude that if one party is charged above cost, then the service provider is exercising market power. Equally, it is incorrect to conclude that if one party is charged below cost, then there is a cross-subsidy from parties on the other side of the market. The service provided to one side of the market is interdependent with the service provided to the other side of the market and there is a feedback effect in operation.
- 57 Market power in a two-sided market is the ability to earn economic rents by sustaining prices on both sides of the market above competitive levels, not to sustain prices above marginal cost on one side of the market. Provided that the market is sufficiently competitive, the feedback effect will drive MTRs down to economically efficient levels.

Price elasticities for demand on both sides of the market

- 58 The effect of competition in a two-sided market does not only have the same effect as it does in a single-sided market; namely to bring the price to end-users down to cost. Competition also alters the price structure across both sides of the market. Competition in a two-sided market continues to exercise pressure on mobile network operator in the usual way - end-users can and do switch providers based on the price for access to the platform. Effective competition has the effect of ensuring that MTRs are set close to the level required to balance demand on both sides of the market. Consumer preferences on both sides of the market will drive the structure of mobile network operator prices required to maximise the participation of the calling and receiving party respectively.
- 59 In order to maximise the benefit for end-users of mobile telephony, mobile network operators need not only attract and retain end-users with differing clusters of goods and services, but also enable network interconnection to the users of the other network. The level of pricing associated with the clusters of goods and services offered to end-users, including subsidised handsets, call and or data plan bundles, and access to users of other telecommunication networks –

which correspond to the price elasticities of demand on both sides of the market for each target sub-group.

60 As Professor Jerry Hausman pointed out in the context of the Commission's earlier investigation into mobile termination, in mobile telecommunications in New Zealand, mobile operators are constrained by mobile subscribers when setting MTRs.¹¹ It is not the case, as some commentators have suggested, that in the absence of regulation mobile operators will set MTRs above the efficient level and mobile subscription rates below the efficient level.

61 MTRs for FTM calls follow the same competitive logic as set out above. There is a benefit to fixed line operators, whether or not they are a mobile network operator, in interconnecting with mobile networks to maximise the benefits for fixed line users. In a competitive market, any differential in the MTRs between FTM and MTM calls would be subject to arbitrage if it were not set at the same rate.

Implications of continuing with LRIC as the competition test

62 The implications of the Commission's approach is that it is both:

- (a) Seeking to impose its limited one-dimensional view of market and competition structure on what is actually there - an approach which can only lead to regulation which does not further the objectives of the Telecommunications Act; and
- (b) Merely transferring wealth from one set of users to another (potentially to the detriment of both parties due to the interrelationship of both sides of the market), rather than regulating in a manner which maximises consumer and producer welfare and dynamic efficiency. This point is covered in the discussion on wealth transfers below.

63 As set out above, the benefits enjoyed by end-users on one side of the market depend on the prices charged to both sides of the market – i.e. price structure is crucial. The Commission proposes to lower prices for one element of the price structure on one side of the market without fully considering the impact on the other elements of the price structure and other side of the market. The waterbed adjustment in the CBA attempts to allow for mobile operators recovering some lost revenue through subscription increases, but this modelling does not examine the structural changes which would result.

64 Even if the Commission were to regulate to reduce perceived barriers to expansion for a new entrant, this would not reduce the monopoly the Commission has said it is concerned about. The Commission has said that there is an absolute barrier to entry into the wholesale MTR termination market.¹² This would imply that market entry or lower prices cannot reduce this – all that happens in the case

¹¹ *Response to Prof. Cave and Prof. Valletti* Professor Jerry Hausman, MIT December 21, 2004. Appendix B to Telecom's Cross-submission on Mobile Termination Draft Report

¹² See paragraph 168.

of intervention is that another wholesale termination monopoly is created. The Commission's proposed approach reflects a misunderstanding of the nature of the two-sided market – namely, that an increase in cost-based competition will necessarily result in a more efficient structure of prices, or a more balanced price structure.¹³ For the reasons set out above, this is incorrect.

Competition test that should be applied

- 65 When correctly analysed, the economics of two-sided markets, such as mobile telecommunications, indicates that the conduct of firms that may be considered anticompetitive in one-sided markets may in two-sided markets improve consumer welfare, (in terms of maximising the sum of consumer and producer surplus) and economic efficiency, (in terms particularly of dynamic efficiency).¹⁴
- 66 In summary, from the findings from the economic literature on two-sided markets,¹⁵ it is clear that the optimal pricing structure for a two-sided platform depends on the following four factors. These are the factors which the Commission should consider in analysing the market(s) for mobile telecommunications in order to determine whether there is sufficient competition to ensure that MTRs likely to be set at the economically efficient level:
- (a) The price elasticities of demand on each side of the platform – it goes almost without saying that the customer group that values the platform more will be willing to pay more;
 - (b) The strength and characteristics of the indirect positive network effect between the two sides;
 - (c) The level of price and non-price competition from other platforms and substitute products on both sides. These include the extent of multi-homing, (where consumers on either side of the platform buy from other platforms in the same market, rather than interconnect) and product cluster differentiation;
 - (d) The short run and long run marginal costs of production on both sides of the platform.
- 67 The effect of these is that the price structure required to ensure an appropriate balance between customers on either side of the market, (“to get both sides on board”) and optimise usage of the platform is usually asymmetric with prices on one side substantially above those on the other side. In many cases prices charged on the “low” side may be below cost, while on the “high” side prices may bear little relationship to the costs incurred on that side.

¹³ *One-sided Logic In Two-sided Markets* Julian Wright, Review of Network Economics Vol.3, Issue 1 – March 2004. .

¹⁴ *The Antitrust Economics Of Two-Sided Markets* - David S. Evans AEI-Brookings Joint Center For Regulatory Studies Related Publication 02-13 September 2002

¹⁵ *Two-Sided Markets: A Tentative Survey* Roberto Roson Review of Network Economics Vol.4, Issue 2 – June 2005.

Summary

- 68 The Commission's proposed approach does not adequately take into account the long term benefits of end users of telecommunications services in New Zealand. In particular the Commission's analysis:
- (a) Does not correctly consider the effects of regulation in the context of section 18 objectives of the Telecommunications Act;
 - (b) Does not deal adequately with the regulatory issues for mobile telecommunications arising from the economics of two-sided markets; and
 - (c) Overlooks the full set of price changes which will be affected by regulation or lack of regulation.
- 69 Accordingly, the Commission's proposed approach will not lead to a regulatory outcome, as a result of intervention at the wholesale level, which maximises the total benefits to end users. Instead, it will likely result in a wealth transfer from one set of end users to another. A full analysis might well show that all end users would be worse off as a result.

Market expansion with MTRs above cost

- 70 The Commission refers in a number of places (e.g. paragraph 203) to its thesis that above-cost MTRs represent a barrier to entry or expansion in the retail mobile market. It has not, however, cited any international examples of this happening. If it were true there would be cases of mobile market entry having been stimulated by reductions in MTRs. Of course the opposite (lack of entry due to high MTRs) would likely not be distinguishable from other causes.
- 71 There is, however, one particularly revelatory case in recent times. The rate of market entry to saturated mobile markets will necessarily be quite limited because the opportunity to grow the market is limited and an entrant has to rely almost exclusively on winning existing customers onto its network. Therefore there are not going to be many observations whether MTRs are high or low. However Bulgaria provides a very good example of the significant benefit mobile market entrants receive from high MTR rates.
- 72 Bulgaria has the highest MTR rates in the EU. At 13.5 eurocents per minute, it is around double the current New Zealand MTR rate. Further, Bulgaria has one of the highest mobile penetrations in the world – around 135%. In this environment, Vivatel was able to significantly grow its share in a market with two mobile incumbents. Between 2006 and 2009 it was able to grow from a 1 percent to an 11 percent market share in those three years. Under the Commission's view of mobile market dynamics this should not have been possible. Furthermore, in fact Bell South (subsequently Vodafone New Zealand) launched a mobile network in New Zealand in 1993 using commercially negotiated MTRs. These examples make it clear that high MTRs do not represent a barrier to expansion.

- 73 A further objection raised to above-cost MTRs is that they can act to maintain on-net/off-net pricing differentials and that these can represent a barrier to expansion for new market entrants. It is further alleged that on-net price discrimination only happens when MTRs are set above cost.
- 74 Telecom has presented information which strongly contradicts the Commission's assertions (such as those at paragraph 291). The Commission has not responded to this evidence. Instead it has developed its own theories of market behaviour. In our view these theories are out of step with regulatory approaches in the OECD for the reasons discussed below.
- 75 On-net pricing is prevalent in markets with BAK for mobile termination and exists in 27 out of the 30 OECD mobile markets. It is reflective of the marketing strategies adopted by the various operators and bears no relationship to MTM MTRs. Indeed, despite no changes in MTRs, Telecom elected to adopt a different marketing strategy with its XT network by not having differentiated rates between on-net and off-net calling.
- 76 The Commission has further noted at paragraph 775 of the Draft Recommendation, in support of reducing MTM MTRs, that incumbent mobile operators are not indifferent towards regulation of MTRs, with established incumbent mobile networks typically opposed to cost-based regulation of MTRs. This does not recognise that MTM and FTM MTRs are generally linked, and indeed have to be to prevent arbitrage between the two rates. Mobile operators' objection to reducing MTM MTRs is likely to be related more to concerns about revenue loss from FTM MTR revenue losses that would flow from the MTM change. The MTM rates themselves do not influence profits to any material degree and have a negligible if any effect on either on-net or off-net mobile price.

THE LRIC COST STANDARD

Marginal cost alone insufficient in two-sided markets

- 77 As set out above, it is not appropriate to consider solely marginal prices in relation to two-sided markets. It is important to consider long-run marginal prices in the context of the other features of the two-sided market.
- 78 In a one-sided market scenario it is generally accepted, as the Commission states in paragraph 429 of the Draft Recommendation, that welfare is maximised in the long-run where prices are set to long-run incremental cost. However, this will not be the case in a two-sided market.
- 79 Similarly setting prices according to long-run incremental cost will lead to appropriate incentives for market entry and competition in a one-sided market – again the relevance of marginal cost in a two-sided market means that this is not a sufficient condition for competitive entry. The Commission's approach, while acknowledging that there is a two-sided market, does not in fact adequately deal with the issues that result. For this reason, the FPP adopted by the Commission should be specified to take account explicitly of the issues associated with two-sided markets. Both the FL-LRIC approach proposed by the Commission for the

IPP and the TSLRIC approach proposed for the FPP in the Draft Recommendation will not lead to the correct result unless these issues are considered.

Appropriate cost methodology

- 80 Even if the Commission's reliance on long-run incremental cost alone as a basis for regulatory intervention was correct, the choice of cost methodology is flawed. The Commission's benchmarking approach is not consistent with the pricing principles set out in other designated services in the Telecommunications Act. Instead of using an IPP reflecting the prices set by other regulators, the Commission has adopted a cost benchmark derived from untested theoretical models. Telecom refers the Commission again to its submission of 6 May and the accompanying NERA report which set out a range of serious concerns with the Commission's benchmarking approach.
- 81 Conceptually, the benchmarking process the Commission is currently undertaking is not benchmarking of a price, but benchmarking of the result that a later benchmarking process (the IPP) will produce. That is, it is proposing that two benchmarking exercises be undertaken: the current exercise to produce figures for the factual case of the CBA, and the future exercise which is the Commission's recommended IPP approach. As the factual case for the CBA should in principle represent the expected IPP approach, these two benchmarking exercises need to align.
- 82 In principle this might mean, for example that the Commission should apply the "networks that are similar to the access provider's mobile network" principle in selecting countries to benchmark. On this basis the rates produced for France (72% 3G coverage as noted above and Malaysia (71% 3G coverage¹⁶) should be deleted from the benchmark set. These networks with coverage far lower than New Zealand's 97% 3G coverage will not have costs reflective of those in New Zealand, except in relation to 2 Degrees' network.
- 83 As noted in Telecom's previous submissions, the cost models suggested by the Commission reflect abstract idealised networks with only limited relevance to the New Zealand position. The Commission should not apply cost estimates derived from theoretical models without carefully considering actual New Zealand cost data, the appropriateness and relevance of the model assumptions to New Zealand conditions and taking into account the issues associated with the two-sided markets. There is no evidence in the Draft Recommendation of any such consideration.
- 84 In other jurisdictions, regulators have adjusted the model outputs to align them more closely with real world situations. Both Covec and NERA have previously submitted evidence, which the Commission sets out at paragraph 488, that regulators typically add a margin to reflect uncertainty and externality effects. The use of a pure, unadjusted LRIC model for setting

¹⁶ At <http://www.huaweidevice.com/worldwide/newsIndex.do?method=view&newsId=101>

regulated MTRs is very rare. The Commission has adopted a standard that can never be achieved in the real world. While taken to absurd lengths, if the Commission had a mind to, it would be impossible for any market to pass the hypothetical test and avoid regulation by the Commission.

- 85 The practices generally adopted by other regulators should put the Commission on notice that reliance on cost estimates from theoretical models is problematic. There are no new facts which support the Commission's departure from the IPP in the Act and its new approach to benchmarking estimated cost rather than prices set by regulators from other jurisdictions. Accordingly the Commission should continue to use an IPP consistent with the pricing principle used for other designated services - based on the benchmarking of prices set by regulators in other comparable jurisdictions. Any other approach is out of step with the usual practice of regulators in other comparable jurisdictions.
- 86 The Commission proposes to use a forward looking long run incremental cost methodology (**FL-LRIC**) as the basis for calculating costs for the IPP.¹⁷ This novel approach to regulation is as yet untried in other jurisdictions. There is no actual evidence to support the Commission's assertion that this methodology promotes effective production and consumption and minimises potential competitive distortions. Careful consideration of the risks affecting the competitive environment in New Zealand, for example the impact on future investment decisions in mobile telecommunications, needs to be undertaken before implementing an untested approach to the IPP in New Zealand.

TSLRIC alone flawed approach to FPP

- 87 The Commission also proposes a different approach to the final pricing principle (FPP) based on TSLRIC. By using the FL-LRIC approach as the IPP, the Commission is excluding the full range of costs which would normally be taken into account in by other regulators. By retaining a FPP which is based on TSLRIC, the Commission risks creating inefficient production and consumption choices based on flawed pricing signals, and so distorting the incentives for market entry, competition and investment in mobile telecommunications. A TSLRIC approach to the FPP which recognises the additional issues associated with two-sided markets is more appropriate.

Differential termination rates

- 88 If regulated cost-based rates are to be set, whether by benchmarking or cost modelling, the Commission should apply equal termination rates for all mobile operators. However, there should be acknowledgement that Vodafone and Telecom face higher costs for their high-coverage networks, while 2 Degrees faces a materially lower cost of running its network as it is confined to the large cities

¹⁷ Paragraph 431 of the Draft Recommendation

only, making its efficient costs much lower than the efficient costs of Vodafone and Telecom. 2 Degrees' lower network costs would presumably be offset by higher costs of roaming charges (for calls originating from and terminating to handsets which are roaming on the more expensive parts of the host network). Therefore the termination charges for 2 Degrees would cover the weighted average cost of operating its network and the roaming charges it pays a third party network operator and asymmetric MTRs would not apply.

GLIDEPATH

- 89 The Commission has not included a glide path. Telecom and others have drawn the Commission's attention to the fact that in most instances, a glide path has been adopted by overseas countries. We note in particular the comments in the recent Supreme Court decision between *Unison Networks Ltd v Commerce Commission* [2007] NZSC 74, by the Commission's own advisor's Meyrick and Co, supporting the use of glide paths over sudden price adjustments when regulating:

By sometimes placing a large adjustment burden on the distributor in a short space of time there is a risk that this process can place undue financial distress on the lines business and endanger the ongoing security of supply. They also assume that the regulator has full information which is rarely the case.

A more reasonable approach to addressing the profitability problem is setting a 'glide path' where prices are adjusted over a period of several years to bring the business to a position of earning a normal return. ...[Paragraph 29]

- 90 Such a departure from the practice employed by other regulators risks regulatory intervention that does not accord with best practice and that may well have unanticipated effects on the competitive environment.
- 91 The Commission draws a distinction between a 'glide path' and 'cost path' where a cost path refers to predictions of how costs might change over time and a glide path refers more generally to the avoidance of abrupt changes in regulated rates. Adopting this nomenclature, Telecom agrees that there could be a cost path either predicted by cost models or forecast as rates that might be regulated in other countries in the future. However the presence of a cost path, if there is one, does not remove the reasons for having a glide path. These reasons have been set out previously and relate to the adjustment problems likely to be experienced both by operators and end users from sudden changes in MTRs.
- 92 Telecom strongly believes that a glide path is appropriate and should be implemented. Should the Commission continue with its position that a glide path is not appropriate, this lack of a glide path has significant costs that would need to be built in to the CBA in order to properly reflect the impact of regulation in this manner.

THE COST BENEFIT ANALYSIS

The counterfactual and factual

- 93 The Commission has based its counter-factual scenario on the terms of the Vodafone and Telecom undertakings together with the commercial agreement for MTAS entered into between 2 Degrees and Vodafone. The counterfactual scenario, by definition should represent a view of the likely situation(s) in the absence of regulation. In the present instance, the undertakings put forward by Vodafone and Telecom represent proposals offered as an alternative to regulation rather than the likely situation which would occur in the absence of regulation.
- 94 The appropriate counterfactual for the Commission to use is the actual content of the current MTR Deeds entered into by Telecom and Vodafone and the commercial offerings by Telecom, and by Vodafone to 2 Degrees. The Undertakings proposed by Vodafone and Telecom should represent a second factual which could then be assessed against both the Commission's factual and the counterfactual.

CBA is incomplete

- 95 The Commission needs to identify the full range of costs and benefits of a change in the MTR before it can determine whether a MTR less than the counterfactual would be more efficient.
- 96 We welcome the fact that the Commission has carried out a CBA. However, at this stage, the Commission has only sought to quantify the costs and benefits as they related to the FTM service. Despite this, the Commission is recommending regulation of four services – FTM, MTM, SMS and IMT. The Commission should not use its CBA based only on the FTM Service to justify and support its decision to regulate the MTM, SMS and mobile termination of internationally originating traffic also. It is not possible to confidently recommend regulation of these other services without a similar CBA exercise and the Commission should develop further analysis around these services.
- 97 Further, the lack of a complete and robust CBA of regulation of the MTM, FTM, SMS Services and IMT makes it hard to submit on Draft Recommendation because no objective justification for regulation has been presented.
- 98 In particular, the CBA treats surplus transfers as benefits of regulation, uses questionable estimates of FTM and MTM elasticity¹⁸, and has a number of shortcomings which lead to overestimates of the impact of regulation on competition, and underestimates of the impact of the waterbed effect. These latter issues arise because the issues associated with the two-sided nature of the market and are detailed more fully in the relevant parts of this submission and the accompanying NERA report. In addition, the Commissioner's view of the potential for a vertical price squeeze in the FTM market is examined in detail in the

¹⁸ The estimates of elasticity used are those the Commission used in the 21 April 2006 cost benefit analysis as part of the earlier investigation into mobile termination. Telecom provided submissions on the correctness of the estimates at that time.

attached NERA report. These inadequacies may mean that the Commission's estimate of the benefits likely under regulation is not robust.

Quantification of transfers and section 18 of the Telecommunications Act

99 The Commission has sought to quantify and place importance on transfers between groups. Telecom has submitted on this on a number of previous occasions and we reiterate that wealth transfers are not relevant in terms of the purpose statement in the Telecommunications Act. Section 18 requires the Commission to consider whether regulation will result in the promotion of competition for the long term benefit of end users. The appropriate CBA is a public benefits test, which captures all the benefits and costs of regulation. Accordingly, in undertaking its CBA the Commission should not consider:

- (a) Wealth transfers between producers and consumers; or
- (b) Wealth transfers between different consumer groups (i.e. from mobile end users to fixed end users).

We note, however, that the Commission has in the past placed considerable weight on wealth transfers.

100 The amendments to sections 52I and 52G¹⁹ of the Commerce Act go some way to addressing Telecom's concerns by requiring transparency around such transfers for other infrastructure businesses. We consider that transparency around the treatment of wealth transfers is particularly important when considering regulation of MTRs where the primary effect is to transfer wealth between consumer groups. For example, the Commission deducts the cost of regulation from its net transfer calculation without any clear rationale.

Vertical price squeeze

101 The Commission suggests that Telecom is likely to possess market power in both the FTM and toll markets. It suggests that the conditions for a vertical price squeeze are likely to be met, and that there is, as a result, a significant barrier to expansion and entry in the relevant retail markets. There are a number of defects with the Commission's reasoning. The attached report by NERA sets out a detailed analysis of the Commission's reasoning identifying the specific errors in

¹⁹ (1) Goods or services may be regulated under this Part only if –

- (a) the goods or services are supplied in a market where there is both –
 - (i) little or no competition; and
 - (ii) little or no likelihood of a substantial increase in competition; and
 - (b) there is scope for the exercise of substantial market power in relation to the goods or services, taking into account the effectiveness of existing regulation or arrangements (including ownership arrangements); and
 - (c) the benefits of regulating the goods or services in meeting the purpose of this Part materially exceed the costs of regulation.
- (2) In any consideration of this test, the part of the test in subsection (1)(c) need not be considered unless the part of the test in subsection (1)(a) and (b) are satisfied.

analysis. Their conclusion is that there is little evidence of a vertical price squeeze.

- 102 The issues identified by NERA in the Commission's analysis heighten the risk of regulatory intervention which actually results in a worse outcome than the existing undertakings process. Comparing the Commission's previous CBA of 21 April 2006 with the latest one illustrates that the market has developed extremely well in the absence of the regulation the Commission was advocating for at the time. This suggests that the decision taken at the time not to regulate the market has produced better outcomes than what the Commission predicted would happen under regulation.
- 103 When the Commission's figures for number of customers in 2009 and prices in 2009 are compared between the two models they show an implied (arc) elasticity for mobile subscription of -2.8. This is because customers have grown far faster than the Commission expected (up 42%) and prices have fallen much more rapidly (down 15%).

Waterbed effect

- 104 The Commission's modelling is likely to understate the waterbed effect as it incorrectly assumes that mobile network operators will ignore the mobile elasticity effect²⁰ when re-setting prices subsequent to an MTR change. Further, the Commission's analysis does not take into account the wider implications of the waterbed effect, on issues such as calling prices, handset pricing, texting, the differential effects on the pre-pay and post-pay populations or other matters. The Commission's assumption that lower MTRs will increase competition is inconsistent with its assumption in relation to the waterbed effect analysis that the level of competition will be constant. Based on the Commission's reasoning it should in fact assume that the waterbed effect would increase over time and take account of this in constructing its CBA.
- 105 The Commission also concludes that mobile penetration is likely to have decreased the waterbed effect. This is in sharp contrast to the updated findings of Genakos and Valetti cited in the attached NERA report which suggests that market penetration increases the impact of competition and therefore the waterbed effect. Accordingly, the Commission's choice of an estimated range of 0% to 50% for the waterbed effect only in relation to its effect on mobile subscription prices is both too simplistic and too low and not based on empirical evidence.
- 106 In fact the existence of a range of different bundles of pricing offers across the pre-pay and post-pay populations, and the level of saturation and competition in the mobile telecommunications market, mean that the impact of the waterbed effect is likely to be more significant and to have greater welfare implications than the Commission's analysis suggests. The range of price and quantity changes resulting from regulation of MTRs is difficult to predict, including the impact on

²⁰ The "Loss of MT Profits" is applied against MSQ0 rather than MSQ1 in the "Waterbed Linear" sheet.

calling prices, subscription prices, texting prices, handset replacement, calling volumes, and the size of the pre-pay and post-pay populations over time.

- 107 The attached paper prepared for Telecom by NERA analyses these points further. NERA also note that the Commission's analysis of the waterbed effect has a number of shortcomings, in particular, that the effect only operates through subscription prices and there is not sufficient consideration given to the impact of the waterbed effect on prepaid customers in contrast to the effect on prepaid customers.
- 108 NERA also discusses the importance of competition and market penetration to estimate the waterbed effect and model the sensitivity of the Commission's CBA to these assumptions. The Commission's analysis of this important issue is incomplete, particularly when considering the findings of Genakos and Valletti in their recently updated paper on this issue. If nothing else, the sensitivity of the net benefit estimates to these assumptions indicates that this issue requires a more rigorous level of analysis. The evidence suggests that the Commission's assumptions in relation to the importance of the waterbed effect, and potential for change over time may be incomplete. It is also very strongly suggests that the Commission's CBA may well overstate the net benefits of regulation.

Pass-through

- 109 Pass-through is an important parameter and the Commission's treatment of it is inconsistent between its factual and counterfactual scenarios. The CBA modelling of the counterfactual should be based on the MTR Deeds and thus should use the actual pass-through data available - the most recent available data on "Effective Rate Reduction" pass-through rates from the audits of pass-through which have been conducted on Telecom and these should be used in the CBA. Other factual scenarios, such as various Undertakings, should have the same pass-through assumptions as the Commission's factual applied as there is no obligatory pass-through in any of them.

FTM elasticity estimate is likely to be too high

- 110 The Commission has used the elasticity estimates in the CBA which were used in the last version of the CBA associated with the earlier investigation.²¹ Using the Commission's own numbers results in an FTM price lower than the Commission previously expected, but lower than expected FTM minutes. This implies the FTM elasticity may be well below the Commission's -0.6. A Figure of -0.1 would fit the data better. In previous submissions, Telecom has also provided information to the Commission suggesting that the elasticity for FTM calls is well below -0.60.²²

²¹ The estimates of elasticity used are those the Commission used in the 21 April 2006 cost benefit analysis as part of the earlier investigation into mobile termination. Telecom provided submissions on the correctness of the estimates at that time.

²² *Mobile Termination Regulation CBAs - A Review and Reconciliation*. - CRA Final Report 23 December 2004 attached to Telecom New Zealand Limited's *Cross - submission in respect of the Commerce Commission's Draft Report for its Schedule 3 Investigation into Regulation of Mobile Termination* 23 December 2004

Similarly, the Commission suggests elsewhere that the elasticity for MTM is - 0.59%. As set out in the previous submissions by Telecom on this topic in debating the earlier CBA Telecom again draws the Commission's attention to the estimates of elasticity: as previously submitted the Commission's FTM elasticity estimate of -0.60 and MTM elasticity estimate of -0.59 are both too high]

- 111 Using these two revised elasticities for mobile subscription and FTM calls, which are based on the Commission's own data, makes the CBA negative, even without correcting for the other errors. The sensitivity of the Commission's data to errors in these values suggests that there is no case for regulation based on the Commission's own CBA is marginal, even if the other deficiencies in the Commission's analysis are ignored.

A REVISED UNDERTAKING

New MTRs prices

- 112 The Undertaking Telecom is submitting with this submission is based on the regulated MTRs that decline by 31 December 2010 to the rates set in Australia by the ACCC (A9cpm). The ACCC has had regard to the same issues the Commission is considering now and the networks it regulates (850 MHz WCDMA nationwide) are very similar to the New Zealand ones. Subsequent to the merger of Vodafone and Hutchison in Australia and the launch of 2 Degrees in New Zealand, the number of mobile networks in New Zealand will be the same as in Australia. If the Commission is convinced that regulated termination rates which based on cost modelling are in the long-term interests of end-users, the simplest way to achieve this outcome is to leverage off the comprehensive work already undertaken by the ACCC.
- 113 Telecom is submitting a revised Undertaking on this basis, but it will not be meaningful unless the rest of the industry puts in the same or very similar undertakings. Our Undertaking is conditional on Vodafone and 2 Degrees completing a Deed of Acceptance and offering Telecom equivalent MTRs. The rationale behind this requirement is that the economics of Telecom offering the reduced MTRs only make sense if Telecom also receives a reciprocal benefit of reduced MTRs from the two other mobile network operators. Notwithstanding this condition, Telecom's Undertaking is a genuine offer of the pricing structure Telecom is prepared to accept provided the rest of the industry will also do so.
- 114 In relation to modelling this offer as one of the options for the CBA, the Commission should assume that the industry MTR pricing is aligned with the Telecom proposal. This will allow the Commission to evaluate whether Telecom's proposal for the industry is better than or inferior to alternatives. Once corrections have been made to the CBA as Telecom sets out above, these Undertaking rates, along with the pass-through rates in the Commission's factual (as corrected) show as delivering greater end user benefits than the Commission's regulation proposal.
-

115 Telecom's revised Undertaking establishes a glide path of one year to reach the ACCC current regulated rate. This rate would be aligned with the ACCC MTAS rate by 1 January 2011. Telecom has converted the Australian rate of 9 cpm using the ten-year average exchange rate to produce a value of 10.6 cpm, which would apply from that date. Beyond 2011, when the current ACCC determination expires, Telecom's Undertaking allows for a further glide path downwards.

In summary our amended MTRs are as follows:

	Telecom Proposed MTRs for FTM and MTM
Up to 31/3/10	15cpm
1/4/10 – 31/12/10	12cpm
1/1/11 – 31/12/11	10.6cpm
1/1/12 – 31/12/12	10cpm
1/1/13 – 31/12/13	9cpm
1/1/14 – 31/12/14	8cpm
1/1/15 on	7cpm

Our existing undertaking proposal to apply a rate of 3.5 cents per text for SMS termination continues into this offer.

Handover of traffic

116 The Commission has suggested at paragraph 933 that MTAS calls should be handed over at the mobile operator's MSC. Telecom has examined the implications of changing the current handover model (at fixed network POIs) to see what would be required to implement MSC handover. We do not yet have detailed costings, but our initial conclusion is that this would be a very significant change to the networks of all carriers, even 2 Degrees.

117 Our revised Undertaking allows for MSC handover from 1 January 2011 (being the date of alignment with the ACCC rates) to allow carriers that wish to, to re-configure their networks to take advantage of this change. Commercial transport charges would then apply to any network operator who did not build the capability to hand all mobile calls over at the MSCs.

Further opportunities to amend undertakings

118 In the Draft Recommendation the Commission stresses that its preliminary view is that it would be unlikely to allow further opportunities for revised undertakings to be submitted after the conference unless substantive issues are raised in submissions that impact on the Commission's assessment of the

undertakings. However, it is important that parties are able to update undertakings later in the process as additional information comes to light, particularly given the issues identified with the current CBA. Further, as noted above, the lack of any CBA relating to all the services that the Commission proposes to regulate has made it difficult to respond to the Draft Recommendation in a comprehensive way.

- 119 Furthermore, Telecom supports a workshop to explore opportunities for greater alignment on the undertakings proposed by all Access Providers.

Appendix - Consultation questions specifically asked by the Commission

Paragraph 454 - The Commission is seeking the views of interested parties on the appropriate counterfactual scenario against which to assess regulation.

Paragraphs 93 and 94 of the submission address this issue. Telecom considers the appropriate counterfactual for the Commission to use is the actual content of the current MTR Deeds entered into by Telecom and Vodafone and the commercial offerings by Telecom, and by Vodafone to 2 Degrees. The Undertakings proposed by Vodafone and Telecom should represent a second factual which could then be assessed against both the Commission's factual and the counterfactual.

Paragraph 455 – The Commission is seeking the views of interested parties on the appropriate factual scenario, including the form of regulation, and the relevant pricing principle and cost standard. The Commission is particularly interested in parties' comments on the Commission's preliminary assessment of cost-based pricing compared to BAK as the pricing principle for the regulated service that would best give effect to section 18 of the Act.

Telecom refers to paragraphs 77 to 111 above in which the CBA and the use of a LRIC based pricing are discussed. Telecom has grave concerns that the CBA prepared by the Commission has a number of shortcomings which lead to overestimates of the impact of regulation on competition, and underestimates of the impact of the waterbed effect. These issues arise because the issues associated with the two-sided nature of the market and are detailed more fully in the relevant parts of this submission and the accompanying NERA report. This may mean that the Commission's estimate of the benefits likely under regulation are not robust. For the reasons set out above, designation of the MTAS and the use of LRIC based pricing may not be the most appropriate regulatory approach. Furthermore, as a matter of principle the Commission's CBA factual should align with its proposed IPP.

Telecom continues to be of the view that it may be appropriate to consider BAK over the longer term. The Commission is referred to our previous submissions on this point. Telecom supports the Commission's view that BAK pricing is not appropriate at the present time.

Paragraph 456 – The Commission is interested in parties' views on the proposed assessment of the impact of regulation.

Paragraphs 93 to 111 set out Telecom's view of the Commission's CBA. Most importantly, the Commission has carried out a CBA of only the FTM market, and used this to justify and support its decision to regulate the MTM and SMS services and the mobile termination of internationally originated traffic.

In addition, the CBA for the FTM market raises a number of concerns which are discussed in the relevant segments of this submission.

Paragraph 621 – The Commission is seeking the views of parties on the proposed approach to determining a regulated price for the MTAS under a factual of cost-based regulation.

Telecom has grave concerns with the pricing approach proposed by the Commission which are set out in more detail in the relevant section of the submission at paragraphs 77 to 88 above. There is no evidence adduced to support the Commission's assertion that its proposed approach promotes effective production and consumption and minimises potential competitive distortions. Careful consideration of the risks affecting the competitive environment in New Zealand, for example the impact on future investment decisions in mobile telecommunications, needs to be undertaken before implementing an untested approach to the IPP in New Zealand.

Paragraph 622 – The Commission is seeking information about whether there are any additional cost-modelled MTRs, to those discussed in paragraph 506, that should be used in benchmarking a cost-based factual price for the MTAS.

Telecom refers the Commission to its submission on benchmarking and the accompanying report from NERA both dated 6 May 2009.

Paragraph 623 – The Commission is seeking the views of parties on how cost-based MTRs are expected to change over time, including whether the Commission's approach to a downward cost-path over time described in paragraphs 516 and 517.

Telecom refers the Commission to paragraphs 89 to 92 of this submission on the subject of glide paths and cost paths, and to the discussion of glide paths in its submission on benchmarking and the accompanying report from NERA dated 6 May 2009.

Paragraph 624 – The Commission is seeking the parties' views on what significance should be placed on the cross-checks discussed in paragraphs 528 to 543 above.

Telecom considers that the Commission has not taken sufficient note of the effect of the two-sided market analysis in determining its approach to regulating MTRs. In particular, the type of cross-checks which should be employed are those which correctly review the nature and structure of pricing on both sides of the market. For the reasons explained in more detail in paragraphs 36 to 69 the first cross-check suggested by the Commission in paragraph 528 of the Draft Recommendation would not be appropriate to test the correctness of the Commission's cost-based benchmarks. Telecom refers the Commission to the principles set out in paragraph 65 and 67 above for examples of the issues which need to be considered in this any cross-check based on retail pricing in New Zealand.

Paragraph 625 – The Commission is seeking the parties' views on the extent to which the Commission's benchmarks are likely to be comparable for the MTAS in New Zealand.

Telecom refers the Commission to its submission on benchmarking and the accompanying report from NERA both dated 6 May 2009 and to its comments in paragraphs 81 to 86 above.

Paragraph 880 – The Commission is seeking the views of interested parties on the proposed approach to assessing the extent to which regulation, when compared to the counterfactual, will promote competition for the long-term benefit of end-users.

Telecom refers the Commission to the discussion of the CBA set out at paragraphs 93 to 111 above and the concerns expressed there.

Paragraph 881 – In particular, the Commission is interested in submissions on the following (including reasons):

- ***The relevant timeframe over which to assess the impact of regulation;***
- ***The extent to which reductions in MTRs will be passed through in some form to end-users – what retail prices are likely to change, and by how much;***
- ***The extent to which regulation will address barriers to entry and/or expansion in the relevant downstream markets (the retail FTM/tolls market, and the retail mobile services market), compared to the counterfactual;***
- ***The extent to which regulation will affect efficiencies (and in what direction) in each of the relevant downstream markets;***
- ***The extent to which reductions in MTRs are likely to lead to higher retail mobile subscription prices (and if so, the strength of such an effect), and any evidence of this: and***
- ***Any other likely consequences of regulation in each of the relevant downstream markets.***
- Telecom has no issues to raise at present with the proposed timeframe used in the CBA.
- In relation to the question of pass-through, the Commission is referred to paragraph 109 of this submission.
- In relation to the impact of regulation on competitive entry, the Commission is referred to the discussion of two-sided markets in paragraphs 36 to 69 and in particular to paragraphs 65 to 67 and paragraphs 70 to 76.
- The Commission asks for comment on the impact of reductions in MTRs on subscription prices. As noted in the discussion of two-sided markets above, this focus by the Commission does not take sufficient account of other dimensions of

the market including the impact on the pre-pay population, investment, dynamic efficiency and other concerns. The Commission is referred to paragraphs 36 to 69 generally.

Paragraph 949 – The Commission is seeking the view of interested parties on the significance and magnitude of call set up charges for mobile networks and parties preferred approach to recovering call set up costs.

Mobile networks tend to have proportionately high per-call costs relative to per-minute costs compared to fixed networks for a number of reasons:

- The switching function is more complex with additional functions such as HLR lookup and location management;
- There is a higher proportion of failed call set-ups for reasons such as devices being switched off;
- There is a higher likelihood of call diversion processing needing to be applied; and
- Average call durations are shorter meaning proportionately more setup cost per minute.

As set out in its previous submissions, Telecom considers that a Minimum Call Duration charging approach represents an efficient way to recover the per-call costs of mobile networks.

Paragraph 950 – The Commission is seeking any evidence of differing cost structures for different operators which could be grounds for asymmetric pricing, and the views of interested parties over the timeframe for any asymmetric pricing to be phased out.

There are materially lower costs associated with building a mobile network only in the densely populated major cities of New Zealand. The Commission itself notes at paragraph 559 that urbanisation is a driver of costs. An operator providing service only to urban areas will have materially lower network costs than operators providing services to suburban and rural areas also. However, this reason is not in and of itself a compelling rationale for asymmetric pricing, as the lower network costs faced by an operator with urban-only network coverage, will be offset by higher roaming charges which are incurred when its customers are outside its network coverage area. Telecom's proposed approach to this is set out above in paragraph 88.