Commerce Commission

Investigation into Regulation of Mobile Termination

Telecom New Zealand's submission in respect of the

Issues Paper

19 July 2004

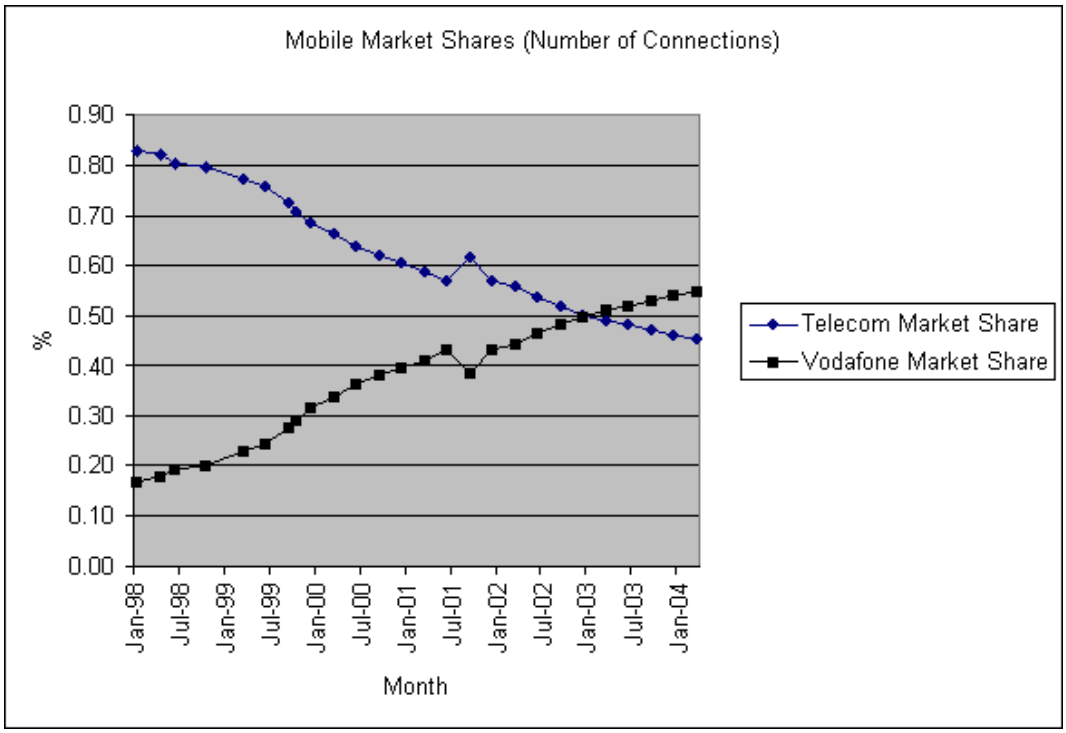
Public version

TABLE OF CONTENTS

A EXECUTIVE SUMMARY

1 Mobile phones are a modern communications phenomenon. In the last 10 years, the majority of New Zealanders have embraced mobile technology, and purchased from an increasing variety of mobile phone services. There are many reasons for this, including reduced size of handset, improved coverage, convenience, novelty, and safety. Most customers want the benefits of mobile communication anytime, any place. These customers enjoy the continual improvements in handsets, coverage and mobile services.

2 In the short period since mobile services were introduced into the New Zealand market, Telecom and Vodafone (in particular) have vigorously competed for market share. The table below speaks for itself.



3 The result of this competition has been a rapid uptake of mobile services and a correspondingly high level of investment in mobile technology, with regular rollouts of advanced handsets and calling options, to meet the demand for cutting edge communications options.

4 But some customers have phones simply so other people can contact them. Other customers, usually older people, young people or those on lower incomes who cannot afford regular mobile calling, have phones for safety or emergency purposes only.

5 These customers simply want to be able to make – or receive – calls when they are away from home or their place of work. They include friends calling friends; travellers calling the AA, or 111; children calling elderly parents; or parents calling

teenagers. The circumstances are as many as there are calls made. These customers don't need the latest mobile handset technology – they just want a mobile phone and the ability to be connected any time any place.

6 A commercial balance must therefore be struck by all mobile services providers, between keeping mobile handsets and subscriptions affordable for *all* customers (including very low use customers), and the cost of making a single call to (or from) a mobile phone. The balance has been struck in the New Zealand market in favour of making mobile services readily available to all and not just some.

7 If mobile network operators had charged lower termination rates during this period, Telecom would have expected this to result in higher subscription prices (access, rental and calling). Telecom believes this would have led to many potential customers simply opting out of the mobile market altogether. This belief is consistent with the evidence from receiving party pays countries, such as the US, where mobile penetration is around 50%.

8 In Telecom's view, the balance that has been struck in this country is about right. If the Commission wishes to alter this balance it has to explain why the benefits of lower termination prices exceed the costs of higher subscription prices.

9 Regulatory intervention into the mobile services and fixed line toll calling markets will distort this balance. This submission shows why regulation of the mobile services and fixed line toll calling markets in New Zealand is unnecessary. As a minimum, regulation will simply shift mobile network costs between different customer groups. More likely, it has the potential to undermine mobile investment, penetration and overall welfare.

10 Telecom submits the Commission is not proposing an analysis of mobile and calling markets that makes commercial commonsense. The *Issues Paper* proposes a market for termination on a single network – a market so narrow that competition is not technically or commercially possible. This artificial market definition will drive the Commission to propose a form of regulation to address a problem that is artificial, not real – without explaining market prices or identifying any consumers who are actually harmed.

11 Other problems with the Commission's analysis include:

11.1 people calling mobiles already have substantial choices in the market. CallPlus currently offers a "whole of day" price of 47cpm, and WorldxChange offers 50cpm/45cpm peak/off-peak. Both have offered these prices for some time. However, the majority of customers continue to purchase FTM calls from Telecom and TelstraClear, who both have a posted price of 71cpm. Clearly, these prices are not driven by mobile termination rates of below 30cpm (excl. GST). Equally clearly, if callers felt they were being harmed they could switch suppliers; and TelstraClear is

not being harmed at all. Before proposing regulation the Commission must be confident these prices in fact reveal a problem; and that lowering termination rates will fix that problem;

11.2 a mobile network operator sets prices for origination, termination, access and value-added services jointly, to cover very large fixed and common costs. Any regulation of termination rates could be expected to result in the prices for origination, access and value-added services rising relative to the counterfactual of no regulation;

11.3 the interdependency of mobile service pricing means regulatory intervention will result in subscribers dropping off (or not joining) the mobile network. This will have adverse consequences for all customers. The subscribers will no longer have access to a mobile phone. Similarly, those wishing to call them will no longer be able to do so. Moreover, all those customers (subscribers and callers) will no longer be making a contribution to mobile operators' fixed costs – meaning prices for remaining subscribers could be expected to rise further;

11.4 the Commission cannot justify regulation, or dismiss the welfare impacts of regulation on customers and their callers, on the basis of prices being "above cost" in a narrowly defined market. Any investigation of the cost of termination involves an allocation of very large fixed and common costs, making the assessment arbitrary;

11.5 there is vigorous competition in the mobile services market. The real and effective competition is for subscribers, as this drives all revenue streams, and Telecom and Vodafone compete hard on price and non-price attributes. It would be an affront to common sense to suggest Telecom or Vodafone are in a less than competitive market or otherwise able to earn economic rents.

12 These difficulties arise out of the Commission's counter-intuitive market definition. The *Issues Paper* proposes a market so narrow that competition is simply not technically or commercially possible. Such an approach is in stark contrast to the approach the Commission itself propounds in its recent *Mergers and Acquisitions Guidelines*, namely:

> *… the Commission defines relevant markets in a way that best assists the analysis of the acquisition under consideration, bearing in mind the need for a commonsense, pragmatic approach to market definition.*

13 Telecom submits that the Commission must take the same commonsense, pragmatic approach here. Failure to do so can only result in a tautological conclusion of market power in this narrow market. This analysis will miss the joint nature of prices and costs for mobile services, the way current prices reflect

underlying consumer demand, and the vigorous competition in the mobile services and fixed line toll calling markets.

14 The fact that the Australian and UK regulators have got their market definition wrong is no reason to perpetuate the same error here. Indeed, their artificially narrow approach has not been adopted by regulators in other countries with calling party pays. For example, the German regulator expressly rejected that approach on the pragmatic grounds that it would mean that each mobile operator automatically has 100% share of its relevant 'market'.

15 Telecom submits that the Commission's analysis must start with facts as found in New Zealand markets, and close examination of the competitive dynamics in New Zealand markets. This shows that current prices and consumer decisions can only be understood in the context of two markets: a mobile services market, and a calling market covering tolls, international calls and fixed to mobile calls.

16 A mobile services market, covering origination, termination, access and value-added services, properly captures the joint nature of prices and costs discussed above. No mobile network operator supplies termination only; nor is termination priced independently. As noted above, and discussed in detail below, the mobile services market is highly competitive.

17 Telecom submits fixed to mobile calling is viewed by customers and suppliers as part of a competitive fixed line toll calling market, that includes national tolls, international tolls and fixed to mobile calls. This is a competitive market and prices reflect consumer preferences across the services supplied in this market.

18 For all these reasons, the Commission should start again with an analysis that uses market definitions that both accord with pragmatic commonsense, and are consistent with the approach which the Commission espouses – and the Courts require – in relation to its Commerce Act jurisdiction. Such an approach must properly capture the features of New Zealand markets, including competing retail prices, the features of consumer demand, the significance of the very large fixed and common costs and multi-part tariffs of mobile network operators, and the high degree of competition in the mobile services and calling markets.

19 Telecom reminds the Commission that the fundamental tenet of the Telecommunications Act is that regulation should be imposed only where – and to the extent – that competition for the time being is failing. The Commission should have a high degree of confidence that this is so, before recommending regulatory intervention. Telecom submits the Commission must conduct a cost benefit analysis (as required by the Court of Appeal and, very recently, a parliamentary select committee). Any cost benefit analysis must include the market dynamics and linkages discussed in this submission.

20 Indeed, the economic costs of the UK regulator's erroneous approach to market definition may already be apparent. Oftel statistics show that the regulated reduction of UK termination rates in July 2003 is both pushing up mobile subscription prices and causing a reduction in mobile subscriptions. For only the second time in UK history, overall mobile penetration would seem to be falling. Although Oftel endeavour to dismiss this 2% fall as within the survey margin of error, the falls in penetration amongst people aged 55 - 64 (7% decrease in 3 months) and those who are not working (5% decrease over the same period) cannot be dismissed for the same reason.

21 Put bluntly, the Commission cannot afford to take a gamble that may jeopardise investment in infrastructure in this country, without first undertaking a proper cost benefit analysis. As a recently released Treasury paper entitled *New Zealand Economic Growth : An Analysis of Performance and Policy* warns:

> *Ensuring the efficient provision of infrastructure raises difficult regulatory issues*.

B OVERVIEW OF SUBMISSION

22 Telecom's submission is divided into 8 parts:

22.1 Part A is the executive summary.

22.2 Part B provides an overview of Telecom's submission.

22.3 Part C is key to the Commission's investigation. It describes the relevant markets: the mobile services market (including origination, termination, mobile access and value-added services), and the downstream retail market of fixed line toll calling.

22.4 Part D is also central to the Commission's analysis: it examines the level of competition between mobile operators in New Zealand, and sets out Telecom's preliminary comments on the appropriate competition assessment to be conducted by the Commission.

22.5 Part E contains Telecom's preliminary comments on the likely effect of regulation.

22.6 Part F sets out Telecom's view on the need for the Commission to conduct a full cost benefits analysis.

22.7 Part G contains Telecom's submissions on the legal framework for the Commission's investigation.

22.8 Part H is a table indicating where in the submission the Commission will find Telecom's response to the pertinent issues raised in the *Issues Paper*.

C RELEVANT MARKETS

23 Telecom submits there are two markets relevant to the Commission's Investigation. These are:

23.1 mobile services. This market includes origination, termination, mobile access and value-added services; and

23.2 the downstream retail market of FTM calling and national/international tolls.

(1) Mobile Services Market

24 Services provided by a mobile network can be broadly categorised as subscription and termination services:

24.1 subscription services are services sold to network subscribers and include: call origination, rental, and value-added services (eg, SMS, voicemail, caller ID, mobile internet);

24.2 termination services are sold to customers of other networks wishing to contact a subscriber to the mobile operator's network.

25 The Commission has, on a preliminary basis, adopted a market definition for mobile termination that is separate from mobile subscription services.

26 The definition of the relevant market(s) is an important first step in an analysis of the need for regulation of mobile termination charges in New Zealand. Telecom agrees with the Commission's statement at paragraph 70 of the *Issues Paper* that the appropriate market definition depends on the purpose at hand. Telecom also agrees with the Commission that "*in the present case, the objective is to determine whether there are competition concerns that may justify some form of regulatory intervention*".

27 But, in determining whether there are in fact competition concerns – and, if so, the extent to those concerns – the Commission must adopt an approach to market definition consistent with its approach under its Commerce Act jurisdiction.

28 Telecom also accepts that whatever market definition is finally adopted by the Commission, there will be scope "*to acknowledge interrelationships between revenue streams where relevant, (for example, in developing the factual and likely impact of regulated mobile termination rates)" (para 85).*

29 However, the interrelationships between termination and subscription revenue streams is at the heart of understanding the competition and efficiency implications of regulation. This nexus between termination and subscription services exists both in terms of supply and demand. The demand for termination

is a function of the number of subscribers Telecom can attract, and the cost of attracting subscribers is also a cost of attracting termination.

30 All the economic costs of regulating termination charges will occur in the subscription side of the market – as a result of higher prices for subscription services. For this reason it is critical that the Commission recognise the nexus between these subscription and termination services within its market definition rather than as an addendum to it.

31 While termination and subscription services are sold to different customer groups, they are inherently interrelated on both the demand and supply side. On the supply side, as a matter of fact a mobile operator cannot sell termination services unless it has first attracted mobile subscribers. Similarly, on the demand side, subscribers value being called. A mobile operator who did not offer the capacity to be called (or who priced this service at a rate that would discourage calls to its subscribers) would be seriously impeded in their ability to attract subscribers.

Pricing of mobile services

32 Investments by mobile network operators, in the technical capabilities from the network down to the handset level, are common or joint over a number of services. This is the case not only for mobile handsets capable of supporting a wide range of voice, data, photo and text services, but it is also the case for a simple pre-paid phone that is only capable of supporting voice. The capabilities of a pre-paid voice only mobile phone include access, making a call and receiving a call.

33 This cost structure is a feature of telecommunications networks: (i) a significant sunk investment in core network assets required to support a number of services, and (ii) a cost for providing access to the network, which is capable of supporting a range of services. As Telecom has pointed out in previous submissions, it is efficient to generate the revenue necessary to cover the cost of investment by offering different packages with different tariff options.

34 In mobile services the tariffs take the form of an access fee which includes a price for connection together with the monthly line rental, free minutes, and a usage price. For a prepaid mobile phone service, the fee to access the service is the price of the mobile handset, and there is a price per minute charge for the calls. For a post paid mobile service the fee for access includes a connection fee plus an ongoing monthly rental, and there is a price per minute charge for the call. Important variations on this general structure include a basket of free minutes, and different peak and off-peak rates. The following table gives an overview of some of the types of tariffs both here and with a sample from overseas. The table illustrates the diversity of packages on offer:

	Telecom NZ	Vodafone NZ	Vodafone UK	Orange UK	Cellnet UK	Movistar ESP
Classic	✓	✓	✓	✓	✓	✓
Time bundle	✓	✓	✓	✓	✓	
Cash bundle						✓
Group-based plan	✓	✓	✓	✓		✓
Fixed mobile bundle	✓				✓	✓
International bundle			✓			
Moveable peak times				✓		✓
Geographical calling						✓
Degressive pricing						
SMS-bundle	✓	✓	✓		✓	✓
Loyalty pricing	✓	✓			✓	✓
Off-peak plans	✓	✓	✓	✓	✓	✓

35 These various plans give customers the option to select a tariff with a relatively high access fee and low call price, or a relatively low access fee and high call price. The level of free minutes also varies. Whether or not the individual customer selects a particular plan will depend on his or her preferences and expected demand for calling. If a customer expects to make a large number of calls, a plan with a high access fee and a low calling price may be preferred; conversely, a customer who expects to make a small number of calls may select a plan with a low access fee and a high calling price.

36 Thus, information simply about costs is insufficient to determine an optimal tariff. Individual customer preferences and expectations are also important determinants.

37 In addition to the revenue they earn from the mobile retail market, mobile service operators consider mobile termination revenue when analysing the economic viability of a mobile service, as this is a benefit of acquiring a customer. It follows that if termination revenue were to change, this will affect the contribution a customer makes to common costs and the return on investments. If termination revenue were to decrease, then the contribution would obviously be less, assuming that the mobile access and calling prices do not change.

Common and joint costs of production

38 In addition, the costs of providing mobile termination cannot be meaningfully separated from the costs of providing mobile subscriptions – again, precisely

because termination is impossible without subscription. In economic terms these services are jointly produced – the production of 'subscriptions' automatically results in the capacity to sell termination. When goods are jointly produced it is well recognised that there is no meaningful way in which to allocate the costs of production between them:[1]

> *It sometimes happens that two different commodities have what may be termed a joint cost of production. They are both products of the same operation, or set of operations, and the outlay is incurred for the sake of both together, not part for one and part for the other. The same outlay would have to be incurred for either of the two, if the other were not wanted or used at all. There are not a few instances of commodities thus associated in their production. For example, coke and coal-gas are both produced from the same material, and by the same operation. In a more partial sense, mutton and wool are an example: beef, hides, and tallow: calves and dairy produce: chickens and eggs.* ***Cost of production can have nothing to do with deciding the value of the associated commodities relatively to each other. It only decides their joint value****. ….. **Cost of production does not determine their prices, but the sum of their prices. A principle is wanting to apportion the expenses of** production **between the two.** (Emphasis added.)*

39 The same is true in the mobile services market. A mobile operator who incurs costs in attracting and supplying a subscriber simultaneously produces the capacity to terminate calls to that subscriber. There is no economically meaningful way in which to allocate costs between subscription or termination - c*ost of production does not determine their prices, but the sum of their prices.* That is, in a competitive market competition will force the sum of revenues from the jointly produced goods to be equal to the cost of producing them. However, the relative prices for each will depend on the relative strength of demand for each in equilibrium – not on any meaningful concept of the relative 'cost' of each.

40 If it is not possible to make a meaningful calculation of cost in the market for mobile termination on each network, it follows that mobile termination on each network is not a separate market – at least not for the purposes of analysing the relative merits of regulating termination.

41 Telecom submits that, if the Commission were to persist with its provisional market definition, it must demonstrate that it makes commercial common sense. If it cannot, then the market should be defined at a broader level to include both subscription and termination services.

42 It is well recognised that mobile telecommunications is an example of a two sided market.[2] A two-sided market exists where the value one set of customers place on services provided by an intermediary depends on the usage by the 'other side'

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1 *Mill, the Principles of Political Economy*

2 Two-sided markets (and the mobile services market in particular) have been given considerable attention in the economic literature (see Armstrong (2004) for a survey and recent work by Rochet and Tirole (2004)).

of the market. For a mobile operator, the value it can offer to people calling its subscribers (and hence the revenue it can earn from those customers) is a direct function of the number of subscribers the mobile operator has.

43 To appreciate the significance of two-sides to the market regard must be had to the nature of the SSNIP test. If we apply the SSNIP test with a two-sided framework we are able to take into account the interactions between each side of the market in determining the narrowest delineation of the product space where a hypothetical monopolist could permanently raise prices and profits above competitive levels.

44 For example, let us suppose Telecom were to implement a SSNIP, ie. raise prices for termination above competitive levels. Under a one-sided framework, Telecom would appear to be a de-facto monopolist assuming there were little reaction from calling parties to any rise in termination prices. However, in a two-sided framework, Telecom would only be found to have market power if a) there is little reaction from calling parties; and b) Telecom is not forced by competition to pass on any increased termination revenues in lower subscription prices. Telecom in fact would be constrained in any attempt to raise profits by increasing termination charges owing to that competitive response by Vodafone.

45 Even if we assume Telecom was unconstrained by callers reducing calls to its mobile subscribers, Telecom would still face increased competition from Vodafone for its mobile subscribers. If it was truly profitable for Telecom to raise termination prices then market dynamics would obviously require Vodafone to follow suit. The temporary result would be that both Telecom and Vodafone would have greater profits per subscriber. However, this would disturb the pre-existing equilibrium in the subscriber market and cause Telecom and Vodafone to compete more vigorously for customers until the pre-existing level of profit per subscriber were re-established. That is, Telecom's overall profit would not have been increased by the SSNIP in termination rates. This widens the market, based on a 'SSNIP', to include termination and mobile subscriptions.

46 Telecom stresses that, in practice, a "SSNIP" has not occurred. Mobile termination rates have not increased for many years. On the contrary, termination rates have been reducing. This, as a matter of fact, demonstrates lack of market power in setting termination charges and the reality that market operators do take into account the impact on subscribers of higher termination prices.

47 Competition between mobile operators in New Zealand is such that a wider definition of the market must be adopted to include the mobile subscription and termination services sold by all mobile operators.

48 Recognising the interrelationship between mobile termination and subscription is vital to gaining a proper understanding of the economic consequences of

regulating mobile termination – especially of regulating it to 'cost'. For this reason, it should be directly recognised in the Commission's market definition.

The Commission's provisional definition of the market

49 The Commission provisionally defines a wholesale market for mobile termination services on *each* mobile network.[3] This is consistent with the approach to market definition adopted by Australian and UK telecommunications regulators (ACCC and Ofcom).

50 However, the Commission should be aware the regulatory precedent on this issue is in fact divided. The approach take by the ACCC and Ofcom has not been taken by regulators in other countries with calling party pays.

51 For example, the German telecommunications regulator (RegTP) considered and rejected this same definition. RegTP took the pragmatic view that such a market definition could not be accepted because, amongst other things, it would mean that each mobile operator automatically has a 100% share of the relevant 'market' and could never have anything other than substantial market power.[4]

52 Telecom submits that RegTP correctly identifies the fundamental error underlying the definition of a separate market for termination on each mobile network. Competition for termination on each individual network is not economically or technically feasible, so as a matter of common sense no separate market for this service can exist.

53 Defining a market in relation to each firm's output is inappropriate. As already discussed, defining the market at the level of termination on each mobile network means that competition is impossible. Since it is not commercially or technically viable to create markets for termination on individual networks, a tautology is created: competition is absent because it is commercially and technically impractical for competition to occur in this product space.

54 The ACCC/Ofcom market definition does not survive the requirement that markets be distinguishable as a matter of commercial common sense.[5] This means the market definition adopted by the ACCC and Ofcom is not compatible with the definition of the term "market" contained in the Commerce Act. Indeed, the Commission quotes the Commerce Act as defining a market as:

> *…a market in new Zealand for goods and services as well as other goods or services that, as a matter of fact and commercial common sense, are substitutable for them.*

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[3] Paragraph 5.

[4] Vfg 21/2000 in Amtsblatt of Regulierungsbehorde fur Telekommunication und Post, Bonn (8.3.2000).

[5] See, most recently, the views expressed in *Brambles New Zealand Limited vs Commerce Commission*, High Court of New Zealand, judgement of O'Regan J and K M Vautier (Lay Member) October 2003 at paragraph 73 - 82.

55 A definition of a market for mobile termination services separate from mobile subscription services is inconsistent with the fact that standalone sale of termination services is never observed: termination can only ever be sold if the network also has subscribers. The absence of actual "termination-only" providers suggests the supply-side economies of scope between origination and termination are so strong that standalone entry is infeasible.

56 The ACCC/Ofcom market definition defines the market as termination on a particular network and, consequently, glosses over the fact that termination only exists to the extent that subscribers exist. In fact, the ACCC/Ofcom market definition implicitly assumes that the demand for termination on a network is, as per the standard one-sided market, a relatively simple inverse function of the price of termination. In reality, the two-sided nature of the market means that lower levels of termination charges can quite possibly result in lower levels of terminating calls - due to the negative impact on mobile subscriptions.

57 In this regard, there is significant factual evidence that artificially low levels of termination charges reduce the number of subscriptions. The US Federal Communications Commission has identified low US mobile termination charges as a key factor in explaining low US mobile penetration rates, as compared with other countries in which higher termination rates keep down prices to mobile subscribers, particularly marginal customers. Despite high US incomes, US mobile penetration at around 50 per cent is substantially below the leading European countries with penetration around 90 per cent.

58 Further, there is already evidence that the regulated reduction of UK termination rates in July 2003 is both pushing up mobile subscription prices and causing a reduction in mobile subscriptions. Oftel statistics show an increase in the total cost of mobile packages for low use mobile customers between July 2003 and October 2003 of 15 per cent. Oftel statistics also show, for only the second time in UK history, overall mobile penetration falling between May and August 2003 from 75 per cent to 73 per cent.

59 While Oftel has said this 2% fall could be explained by its survey's margin of error, the modest overall fall in subscriptions masks much larger percentage falls in subscriptions amongst households on incomes below £17,500 (falling from 64 per cent to 60 per cent) and for those not working (falling from 63 per cent to 58 per cent). The survey also showed that penetration declined by seven per cent amongst those aged between 55 and 64 over the same period.

(2) Fixed Line Toll Calling Market

60 The Commission has provisionally defined an affected downstream retail market for fixed to mobile (FTM) calls in its *Issues Paper* because mobile termination is used as an input into the supply of FTM services to customers. The Commission raises a concern that a potential lack of competition in the "market for mobile termination" may be resulting in unreasonably high charges for fixed-to-mobile

calls[6]. Telecom disagrees with the Commission's definition of the FTM market, and with the Commission's statement that effective competition in this market is, or has been, prevented because competitors must pay for termination services from Telecom and Vodafone.

Telecom's market definition

61 Using a SSNIP analysis, it is clear that the product market includes at least FTM and national and international toll calls both because of (1) the clear supply-side substitutability between the three sets of products and (2) on the demand-side, customers generally buy the products together, indicating a market that includes both FTM and toll calls.

62 This is consistent with the ACCC's reasoning in its mobile termination rates decision, where it found a wider market of FTM and national long-distance and international calls, based on complementarities in their provision and because they are offered as a bundle in pre-selection offerings by carriers.

63 The *Issues Paper* argues for a narrower market than the one defined by the ACCC by noting that customers in New Zealand can pre-select different carriers for FTM and toll calls. In Australia, customers must pre-select the same carrier for FTM and tolls.

64 However this distinction does not hold in practice, for two reasons. First, the *Issues Paper* does not consider supply-side substitution in its proposed market definition for FTM calls. Second , our experience of the market is that customers do, in practice, pre-select their alternative toll-carrier for both tolls and FTM calls, despite the introduction of multi-basket pre-selection. Telecom is responsible for activating Non Code Access (NCA) for those customers who wish to switch to alternative carriers for their toll calls. **[**

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65 This strongly suggests that, on the demand-side, customers are purchasing the services together, rather than de-coupling services as they are technically able to. This may be because economies of scope on the demand side are leading customers to choose tolls and FTM calls as one bundle, rather than spend effort and time separating carriers out by type of call.

66 Even if not all customers buy all three products together, the supply-side substitution argument for a wider market than that of tolls alone is definitive: FTM services are constrained by national and international toll services because of the ease of supply-side substitution by firms supplying the three products. There is clear evidence that toll carriers easily can – and do –use existing assets to supply

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[6] Paragraph 3, *Issues Paper*.

FTM calls. The incremental investment cost of providing FTM services is very small, given toll carriers have already incurred all necessary set up costs to provide toll products. Toll bypass carriers are not required to do anything extra when expanding to FTM calls – rather, the FTM calls will go through on the links already established for toll calls.

67 Such complementarity of supply is demonstrated in practice – most toll bypass carriers in New Zealand provide all three products together.

68 The Commission has previously suggested that the supply-side substitution test for tolls and FTM services is not met on the basis that the move by toll bypass carriers into FTM calls services is 'more of a discrete step', because of high termination charges prevailing in the mobile market[7].

69 Telecom disagrees. Termination charges (whatever the level) do not represent a cost that prevents FTM and tolls from being close substitutes on the supply-side. The supply-side test is based on whether firms can shift production easily and in the short-run, using *largely unchanged production facilities* and *little or no additional investment.* Mobile termination charges do not represent an investment cost that prevents firms from switching in the short term – rather, they are a variable production cost (i.e. dependent on units sold) – not an investment (i.e. fixed costs of acquiring income-producing assets).

70 Telecom submits any product market definition narrower than the one proposed above would not capture the key market demand and supply-side dynamics relevant to this Inquiry.

71 In *Decision 497*, for the purposes of the wholesale regime the Commission defined separate markets for customer groups for some services and not others. Telecom submits that for the purposes of this Inquiry, it makes no difference to the competition assessment whether the customer segments represent separate markets or different dimensions of the same product market. As we explain in Section D below, all customer segments are experiencing effective competition, in fact, the conditions of competition are the same across the segments/markets.

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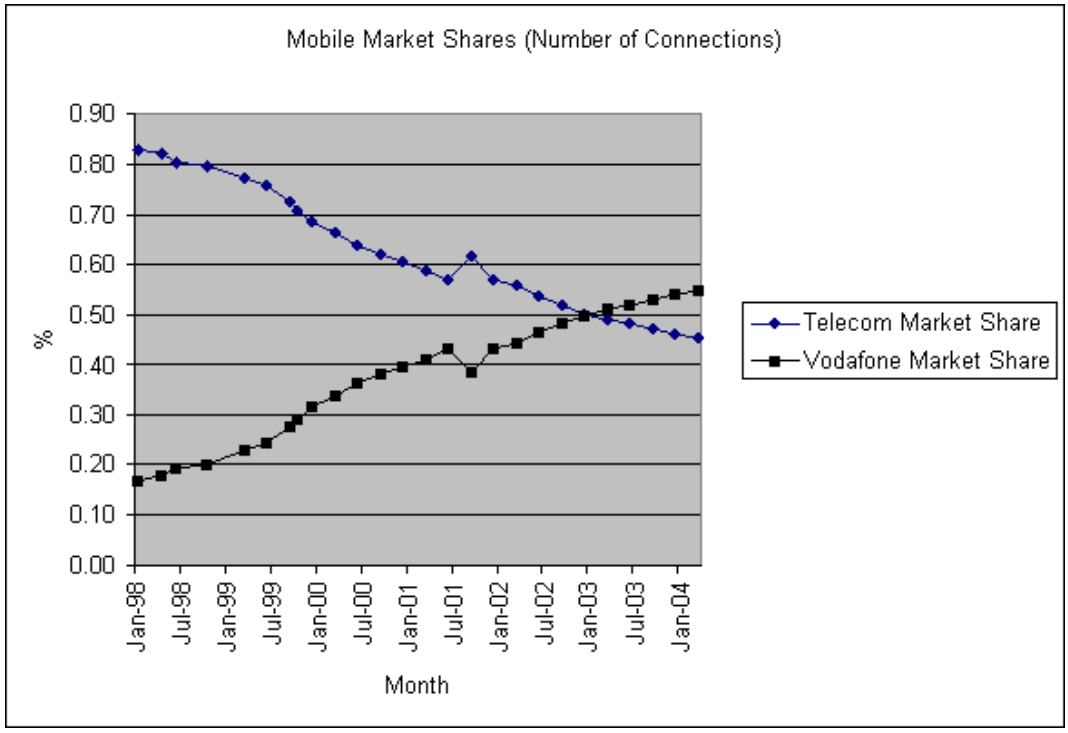
[7] TelstraClear Wholesale Application Draft Determination, 24 November 2002, para. 133.

D COMPETITION ASSESSMENT

(1) Mobile Services Market

72 This section examines the level of competition between mobile operators in New Zealand. It demonstrates that the level of rivalry between Telecom and Vodafone is intense; that mobile competition is workable and effective; and that consumer welfare is unambiguously and quickly improving.

73 As noted above, the table below speaks for itself.



74 The rapid growth of Vodafone at Telecom's expense shows the market structure in New Zealand involves two vigorously competing firms. While market concentration is high, market concentration is only one indicator of the state of competition – a full competition analysis is warranted to determine whether a market is subject to effective competition.

75 Telecom notes with concern that the Commission quotes from an OECD Mobile Tariff Basket Comparison report that New Zealand mobile prices were higher than all OECD countries except Australia, Slovak Republic, Poland, Mexico and the Czech Republic (paragraph 140 of the *Issues Paper*).

76 Telecom submits that it is entirely inappropriate to infer from this that there is any lack of domestic competition. The OECD study says nothing about the relative cost of providing mobile services in different countries, and the methodology used

to arrive at a single 'price' for all countries means the final number (and ranking) must be treated with considerable scepticism.

The Mobile Market and Rivalry

77 Competition in the mobile market is not just characterised by price based competition, but is based on offering consumers differentiated services, enhancements and branding. It involves true market rivalry. The mobile handset is moving away from being a device for voice communication in real time to a mobile personal communications and entertainment device (such as the recent smartphones).

78 At the same time, a large group of marginal consumers comprise mid to low level users of plain old voice services. There are a significant number of these consumers currently on Telecom's TDMA network, which is likely to be retired in 2007. The risk is that regulation of termination may result in new handset prices that may not be affordable to end users.

79 Competition in the mobile services market in New Zealand is characterised by rivalry between two service providers. This rivalry is delivering an ever expanding set of services which are highly valued by (and thus benefit) end users. Termination revenue received by mobile operators plays an important role in making these services available to a wide range of customer segments. Regulating termination rates will therefore have an as yet undetermined effect on the future evolution of mobile technologies, services, prices and availability, therefore distorting the market.

80 The mobile telecommunications industry is a dynamic, fast-moving industry. Competition in these markets is fundamentally different from the competition found in markets for commodities such as canned foods or soap, even in the long run. The rapid pace at which mobile telecommunications markets, technologies and services are evolving means that competition between mobile operators takes the form of differentiated services and bundles with multipart tariffs, delivered over differing technology platforms, rather than focussing simply on single price points for some homogenous good.

81 What makes the mobile industry especially dynamic, and hence unpredictable, is its relative immaturity coupled with the rate at which the technology platforms are evolving. The services, bundles, tariffs and even technology platforms on which mobile operators compete have experienced and continue to experience, rapid turnover and obsolescence. In contrast to the fixed telecommunications world, where technology lifecycles of 10 - 20 years are the norm, Telecom and Vodafone in New Zealand have seen over the past two decades average technology platform life-cycles that are much shorter, as discussed below. Further, this period of dynamic evolution shows no signs of slowing in the near future with the roll out of 3G networks. In fact, it is likely to intensify as convergence between the mobile,

wireless and fixed telecommunications markets and IT and entertainment markets occurs.

82 All of this makes any regulatory intervention in the form of (retail or wholesale) price control a risky proposition, to be performed only where a clear problem related to the price of a particular service or good can be identified.

Technical Capabilities of the Rival Networks: 1987-2004

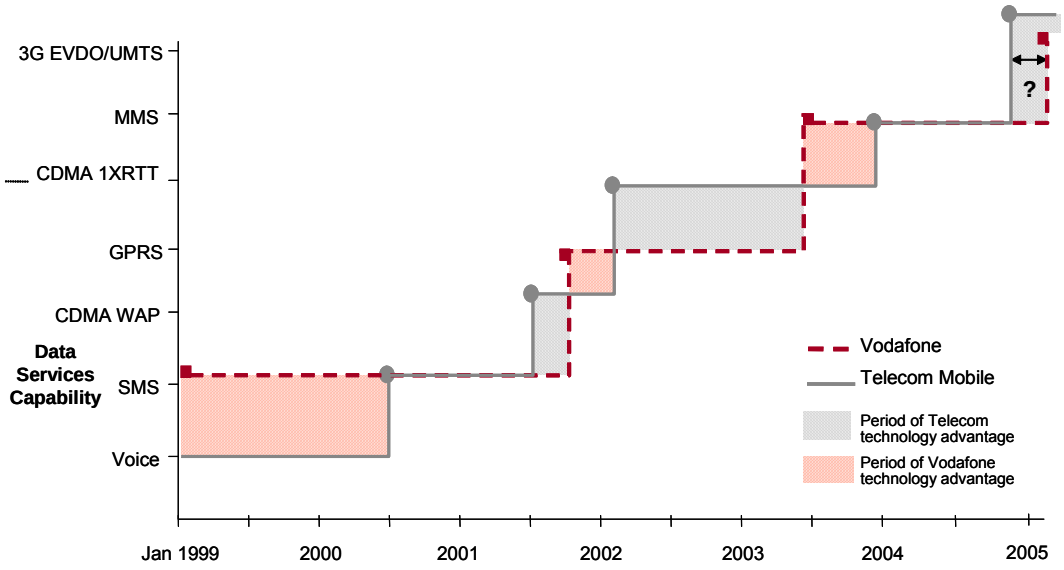
83 The technical capabilities of Vodafone's and Telecom's mobile networks (and of the handsets available for them) determine the general range of services each can deliver, and hence play a large part in driving any competitive advantages either provider may have. The service provider in the position of "technology leader" can expect to experience significant increases in brand preference and positioning.

84 Consequently, Telecom Mobile and Vodafone are continually striving to deliver new services that customers will value, and to enhance their current services, in order to gain a leap on the other. There is a dilemma for each service provider when making a decision to invest in new technical capabilities. On the one hand, there is a risk that customers will not value the new services that can be provided, in which case the investment does not pay off and the asset is stranded. On the other hand, the risk of *not* investing in innovative technical capabilities is that a rival service provider does, and in doing so gains the position of technology leader, and first-mover advantage. If this happens, there is the risk that significant market share could be lost to the rival.

85 Of course, the importance of technical capabilities, and the size of the potential risks and rewards of investing in increased technical capabilities, are increased where, as in the case with Telecom and Vodafone, the competing service providers use competing sets of technical standards.

86 The following diagram and timeline discussion illustrates how this competition has manifested itself in the New Zealand markets, and in particular, how the technical capabilities offered by Telecom and Vodafone over the last 5 years have leap-frogged each other on several occasions.

Technical capability comparison



87 Telecom launched the first mobile phone service in New Zealand in 1987. This was based on the Advanced Mobile Phone System, or AMPS standard, which was an analogue network capable of delivering only voice communication services (including voicemail).

88 In 1993, Bell South launched a competing mobile service in New Zealand which was based on the Global System for Mobile, or GSM standard. Its GSM network was a digital network. This meant that even although Bell South entered the market after Telecom, it had a competitive advantage in that it could deliver a broader range of service features than could be delivered over Telecom's network (although initially at least, coverage on the GSM network was limited).

89 In order to close this gap, Telecom introduced IS136 digital AMPS (often referred to as the TDMA network), which supported advanced services such as Caller ID.

90 However, the GSM network allowed customers to roam in European countries, which TDMA customers could not do; and it had cheaper handsets than were available for TDMA networks.

91 The GSM network and handsets were also equipped to support Short Message Service, or SMS (text messages of approximately 150 characters), in contrast to TDMA handsets, many of which could not support text messages at all, or could only receive (not send) them.

92 In November 1998, Vodafone purchased Bell South's mobile network, and set about strongly targeting the youth market, focussing on the GSM network and its handsets' superior SMS functionality.

93 Telecom Mobile addressed this functionality gap through new handsets for its TDMA network, and in July 2001 it launched a digital mobile network based on the Code Division Multiple Access or CDMA platform. The launch of the CDMA network not only matched Vodafone's SMS functionality, but provided additional capability to deliver services such as Wireless Application Protocol or WAP services (essentially wireless internet). A WAP browser installed on mobile phones provides the ability to browse content and provide basic interactive services, such as mobile banking and downloading ring tones. This handed the superior functionality advantage, and the role of technology leader, to Telecom Mobile.

94 Vodafone quickly responded with an upgrade of its GSM network to allow General Packet Radio Service, or GPRS, which provided customers on the GSM network with IP connectivity which allowed customers similar data connectivity services to those available using Telecom's CDMA network, but at slightly faster speeds (GPRS can support connectivity at up to 115kbps).

95 Telecom in turn upgraded its CDMA network further in 2002 to 1XRTT, an evolution of CDMA that significantly improves the spectral efficiency of voice and provides IP connectivity at up to 153kbps (although usually averaging between 60-80kbps). At the same time it launched its Mobile JetStream service, allowing email downloading and high-speed internet and intranet/LAN access in much richer colour than had previously been available.

96 Vodafone's response to Mobile JetStream was Vodafone Live!, launched in 2003. This is a Vodafone-specific portal through which Vodafone customers can download services and applications tailored to mobile users.

97 Vodafone Live! supports Multi-media messaging services (MMS), which allows messages that include text, pictures, sounds and video clips, and which require MMS clients in the network and the handset. Telecom Mobile has matched these MMS capabilities using its CDMA network. At the moment, the networks are relatively evenly matched, although Telecom's CDMA does allow data connectivity at greater speeds than Vodafone's GSM network.

98 In short, the process of rivalry between Telecom and Vodafone has seen a series of alternating investments either anticipating or in response to the competitor. Each of the investments has been significant; and each has been made in the presence of the risk of being stranded if the investment is made too early and customers do not value the services, or being stranded by a rival investing in a technology that provides additional services that customers value.

99 In such a dynamic environment, the critical business need is to earn sufficient revenue for each investment to be economic. This dynamism, and thus this need, looks set to continue, if not intensify.

100 Both Telecom and Vodafone have recently announced intentions to launch 3G networks, Telecom with EV-DO by December 2004, and Vodafone with UMTS in 2005. Many industry commentators consider that Telecom will ultimately need to invest in UMTS as well. 3G technologies provide data speeds of 384 kbps – 2Mbps and are capable of supporting high speed data connections, multimedia services and video calls. Telecom has also announced its intention to bring a "push to talk" (ie walkie-talkie) mobile phone offering to the market at roughly the same time as its EV-DO launch, and Vodafone is again expected to match this in early 2005.

101 Over the next five years, Telecom's TDMA network will become obsolete and will be retired, and the CDMA and GSM standards will continue to evolve and provide new and innovative broadband services. It is envisaged for example, that Voice over IP and application-specific Quality of Service capabilities will be available on wireless networks within this timeframe. In addition, both standards are also seeking to converge with a large number of high-speed wireless access standards such as Wi-Fi and Wi-Max.

102 Further possible developments which add to the uncertainty of the mobile service providers' future operating models include software defined radio (SDR) and IP Multimedia Systems (IMS). These developments will enable handsets to communicate with different network types. The handsets will be less and less bound to a particular network, or network standard (eg GSM, CDMA), for the services customers value e.g. voice calls.

103 The timing of these developments in service capabilities will be very much a function of the pace at which the technologies and standards become suitable for commercial deployment, as well as the economics and specific plans of service providers. For example, a mobile-only operator such as Vodafone could choose to aggressively pursue a dual mobile/Wi-Max approach, with handsets capable of swapping between the two types of networks. This would allow Vodafone to bypass the fixed networks of Telecom, TelstraClear and other fixed network operators.

104 Furthermore, Telecom has already publicly announced its intention to invest in next generation technology with an intention of making a mobile phone simply another application (along with fixed phones, computers, PDAs etc) across which its customers can access a common set of advanced applications and services.

The Commission's conclusion

105 The Commission concludes in paragraph 141 of the *Issues Paper* that:

> *Despite the above discussion suggesting that the mobile services market is less than fully competitive it is considered unlikely that any reduction in the mobile termination rate via regulation would benefit mobile-to-mobile users as much as fixed-to-mobile users. Oftel and the ACCC both concluded that the*

greatest benefit of regulating mobile termination rates would come from expected reductions in fixed-to-mobile rates. The ACCC stated that it:

> *"…expects the greatest competitive benefit from continued declaration of the [mobile termination] service is likely to occur in the market within which fixed-to-mobile services are provided."*

106 The Commission's reasoning is flawed for two reasons. First, the Commission refers to "the above discussion" as evidence that competition between mobile operators is "less than fully competitive". However, the discussion to which the Commission refers does not provide any justification for such a conclusion. The only evidence of a lack of competition in "the discussion above" appears to be the results of the OECD benchmarking report. But, for the reasons already provided, the OECD report itself is flawed and does not support the conclusion of a lack of competition between mobile operators.

107 Second, the Commission makes the statement that "*it is considered unlikely that any reduction in the mobile termination rate via regulation would benefit mobile-to-mobile users as much as fixed-to-mobile users."* It is not clear whether the Commission is referring to mobile-to-mobile users as a subset of mobile subscribers. However, if the Commission is referring to mobile subscribers in general, then these users will certainly lose as a result of regulated reductions in mobile termination (see discussion below). Mobile operators in New Zealand are governed by normal commercial drivers – if revenues are cut from one source, such as termination, they must attempt to recover these from elsewhere, such as subscription services.

108 Some customers must be made worse off as a result of regulation of termination charges. The important question is whether the losers will outweigh the winners – not whether some customers win more than others. We address this question in the next section (Part E) examining the effect of regulation.

(2) Fixed Line Toll Calling Market

109 As we discussed in detail in our market definition section above, Telecom submits that the Commission has failed to recognise the effective competitive constraints placed on FTM products by toll suppliers in the New Zealand market. It is also Telecom's view that this wider calling market is effectively competitive.

110 All customers (residential, business and corporate) have a choice of many suppliers for their calling needs, including Telecom, TelstraClear, CallPlus (Slingshot tolls), WorldxChange, Ihug, Compass, GlobalOne and Cry.

111 The intense rivalry (resulting from the entry of TelstraClear in the early nineties and toll-bypass carriers in the mid nineties) has impacted significantly on Telecom's share of the fixed line toll calling market. The graph below shows how, in the past two years, our market share of residential customers' spending on calls has fallen by five percent. It also shows the correlation between Telecom's share

of spending on all three types of calls – which is further evidence that all three calling types lie in the same market.

[

] RI

112 Rivalry is also intense in the supply of calling products to business customers, where, for example, TelstraClear and other competitors now have a **[ ] RI** signed up for calling:[8]

[8] Market share information for corporate customers is unavailable.

[

] RI

113 Also as a result of effective competition, customers have a wide range of price points to choose from, as the table below of some recent offerings to residential customers shows:

	Telecom			**TCL**			**Ihug**			**Slingshot**			**WxC**		
	Peak	*O/P*	*Flat*	*Peak*	*O/P*	*Flat*	*Peak*	*O/P*	*Flat*	*Peak*	*O/P*	*Flat**	*Peak*	*O/P*	*Flat*
National	45c 29c◊	19c 9c◊	n/a	45c	19c	25c	n/a	N/a	20c	n/a	n/a	14c	45c	15c	n/a
Aus	65c	47c	n/a	65c	49c	25c	n/a	n/a	27c	n/a	n/a	14c	30c	25c	n/a
UK	65c	54c	n/a	65c	49c	25c	n/a	n/a	27c	n/a	n/a	14c	27c	25c	n/a
USA	65c	54c	n/a	65c	49c	25c	n/a	n/a	n/a	n/a	n/a	14c	28c	25c	n/a
Ireland	65c	54c	n/a	65c	49c	25c	n/a	n/a	30c	n/a	n/a	14c	27c	25c	n/a
Canada	65c	54c	n/a	65c	49c	25c	n/a	n/a	n/a	n/a	n/a	14c	28c	25c	n/a
China	$1.59	$1.09	n/a	$1.59	$1.09	49c	n/a	n/a	65c	n/a	n/a	14c	34c	29c	n/a
FTM	99c	49c	71c	85c	45c	71c	n/a	N/a	49c	n/a	n/a	47c	50c	45c	n/a

Source: price information from carriers' websites

114 The price transparency in this market and the entry of many new competitors has led to significant drops in our toll prices to all customers:

[

] RI

115 As noted by the Commission, Telecom and TelstraClear have not lowered their posted retail residential prices of FTM calls for some time, despite competitors offering prices up to 43% cheaper. **[**

] RI

116 **[**

] RI

117 The different FTM prices are driven by differing demand conditions: our business customers spend significantly more on FTM calls than do our residential customers, and, as a result, our business customers are highly price-sensitive and prepared to take all of their calling business to a competitor if offered a better deal. This has led to Telecom and other competitors competing against each other in an

effort to retain market shares to the point where FTM market prices – as well as toll prices - are significantly lower than those available to residential customers.

118 Residential customers have different demand characteristics. As noted earlier, the evidence is that residential customers buy toll calls as a bundle, and we believe customers choose alternative carriers predominantly on the basis of national and international toll prices when comparing different carriers' deals. Thus, Telecom has mostly focussed upon price reductions for national and international toll calls in its efforts to retain residential calling customers and to stimulate calling demand.

119 This also helps explain why there is little reason to believe that there will be a direct correlation between changes in termination rates and changes in retail FTM prices. In this regard it is relevant to note that in the weeks after the ACCC released its draft decision to halve mobile termination rates, Telstra announced an increase in residential FTM prices.

Alleged competitive advantage to vertically integrated fixed/mobile carriers

120 The Commission hypothesizes in the *Issues Paper* that vertically integrated fixed and mobile carriers may derive some form of competitive advantage from 'high' termination rates. At paragraph 10 and paragraph 147 respectively the Commission outlines its notion that such carriers could impose a price squeeze on their one dimensional rivals:

> *If mobile termination is priced above cost, a vertically integrated provider (one that owns and operates both a fixed and a mobile network) would have an advantage in competing in the fixed-to-mobile market. A substantial portion of that provider's mobile terminations would be at a rate closer to actual cost as they would terminate on their own network. This may create a price squeeze for other fixed network operators, reducing effective competition in this market.*
>
> *It can be argued that the current market structure provides incentives for mobile operators and integrated carriers in particular to keep mobile termination rates high. An integrated carrier with a substantial share of the mobile market can price discriminate by setting retail fixed-to-mobile prices for its most lucrative fixed line customers at around, or even below, the mobile termination rate and rely on the mobile business earning a margin from the high termination charges. This tactic will impose a price squeeze on any fixed network operators trying to offer retail fixed-to-mobile calls in the same market and limit these operators' ability to compete for fixed line customers.*

121 Telecom rejects the suggestion that a vertically integrated carrier has an incentive to 'keep mobile termination rates high' or to impose a 'price squeeze'. Current market conditions simply do not permit a profitable price squeeze strategy, which would require some prospect of competitors leaving the market in response to retail FTM prices. To the extent that a non-vertically integrated competitor may find it difficult to match the pricing of retail FTM calls to some customers this is evidence of no more than the fact that vigorous competition is indeed occurring.

In markets where FTM prices drive consumer decision-making, retail prices will trend down toward termination rates, regardless of the level of termination rates.

122 Put simply, the Commission cannot justify regulating mobile termination simply because it thinks that service might potentially be used in a price squeeze at some future time.

E LIKELY EFFECT OF REGULATION

123 This submission demonstrates that both the fixed line toll calling market and the mobile services market are competitive. There is no competition problem to fix, and regulation can be expected to distort, rather than promote, competitive market outcomes.

124 In section C above, Telecom describes how a mobile network operator sets prices for origination, termination, access and value-added services jointly to cover very large fixed and common costs.

125 A mobile network operator may react to a reduction in termination revenues in a number of ways. In general however, there will be an attempt to maintain the contribution from customers by changing the pricing plans. This may involve a change in any combination of the access fee, the call price, and available free minutes. All customers and potential customers will be affected. Those that do not "drop off" the network (or, in the case of potential customers, decide not to subscribe) will pay higher prices.

126 An example of the type of customer who is at risk of dropping off the network altogether, or not joining at all, are those customers who are currently on a pre-paid plan and who predominantly receive calls. This type of customer will include the teenager who cannot afford the fixed charges associated with a low call cost plan but does want to be contactable by friends and family. In any given month, approximately **[ ] RI** customers with pre-paid mobile phones only receive calls, and the average life of a prepaid phone is **[ ] RI** months.

127 If termination revenue were to decrease in response to a regulated reduction in the termination price, it is reasonable to assume there will be an increase in the price of the subscription package (handset, access fee, per call fee) in this way. This will reduce the number of customers purchasing subscription services – in other words, connecting to the network.

128 As discussed earlier, the US Federal Communications Commission identifies low US mobile termination charges as a key factor in explaining low US mobile penetration rates compared with other countries in which higher termination rates keep down prices to mobile subscribers, particularly marginal customers.

129 In short, regulatory intervention in this system has the following implications:

129.1 Because prices are determined jointly by the mobile network operator, there is a trade-off between revenue streams: a cap on the revenue earned

from one service will require firms operating in a competitive market to recover an increased proportion of costs from other services.[9]

129.2 Mobile termination is relatively inelastic; capping contributions on this service will require recovering a higher proportion of common costs from more elastic subscription services. This will have the net effect of lowering total consumption and consumer welfare.

129.3 "Pass through" of any regulated reduction in termination rates appears unlikely, particularly in consumer markets.

129.4 No change in the degree of competition is likely.

130 Regulators overseas appear to have regulated termination rates in the face of these difficulties by simply betting that mobile network operators will find it difficult to raise prices. However, this is very short term thinking. The key consideration is the impact on investment by mobile network operators (and corresponding benefits to end-users) over time, and whether the regulation has resulted in prices for origination, access and value-added services dropping less quickly, or new services and new handsets being introduced less rapidly, than would otherwise have been the case. Early indications are that regulation is having this effect in the market. Oftel statistics show that the regulated reduction of UK termination rates in July 2003 is both pushing up mobile subscription prices and causing a reduction in mobile subscriptions. Overall, penetration has fallen from 75% to 73% of the population. Although Oftel endeavour to dismiss this decrease as being within the survey's margins of error, the statistics relating to falls in penetration amongst low income and older people were well outside error margins. The proportion of 55-64 year olds owning/using mobile phones fell from 68% to 61% in the period from May to August 03. Also over the same period, penetration amongst those who are not working fell by five percent.

131 In the fixed line toll calling market, as discussed above, the relationship between the mobile termination price and the fixed to mobile price is not strong. This is because the fixed line toll calling market includes a number of other call types as a result of competition and customer preferences. Therefore, Telecom submits that the regulation of termination is more likely to have a detrimental effect on customer welfare in the mobile services market, and much less likely to have any beneficial effect in the fixed line toll calling market.

132 The Commission's cost benefit analysis must reflect these trade-offs.

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[9] Both the ACCC and Oftel have acknowledged this trade-off in their analyses. See section 7.1.2 of ACCC (2004), Mobile Services Review: Mobile Terminating Access Service (March), and paragraph 1.5 of Oftel (2002), *Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O2, Orange and T-Mobile for terminating calls from fixed and mobile networks* (December).

F NET BENEFITS AND COSTS AND THE NEED FOR A FULL COST BENEFIT ANALYSIS

The need for a full cost benefit analysis

133 The Commission has queried the need for a full cost benefit analysis in the *Issues Paper*. In Telecom's view, a full cost benefit analysis is essential to a proper economic evaluation of proposed regulation. Indeed, in order to make a rational decision to regulate a service for the first time, Telecom considers that the Commission is legally required to conduct a comprehensive cost benefit analysis.

134 The Court of Appeal has long mandated the desirability of such a methodical and verifiable approach to the Commission's regulatory function. In *Telecom Corporation of NZ v Commerce Commission* [1992] 3 NZLR 429, Richardson J remarked in the context of authorisations under section 66 of the Commerce Act (at 447) on:

> *…the desirability of quantifying benefits and detriments where and to the extent that it is feasible to do so. The commission encourages applicants to quantify anticipated public benefits. In this case certain major efficiency gains were quantified for Telecom at some $75 million. While both the commission and the Court did not accept elements in that quantification, both bodies considered that there would be significant efficiency gains if Telecom had management rights over both AMPS-A and AMPS-B. In those circumstances* ***there is in my view a responsibility on a regulatory body to attempt so far as possible to quantify detriments and benefits rather than rely on a purely intuitive judgment to justify a conclusion that detriments in fact exceed quantified benefits****.* [Emphasis added]

135 This is particularly important in assessing whether to regulate mobile termination because the potential benefits and detriments are so closely intertwined (ie, they occur on two sides of the same market). In these conditions, is impossible to use qualitative judgment to assess the relative magnitude of these impacts.

136 The utility of conducting cost benefit analyses to accomplish informed regulatory decision making has also been recently recognised by the Commerce select committee in the electricity and gas context, by new clause 172F of the Electricity and Gas Industries Bill. Under new clause 172F, whenever the Electricity Commission seeks to exercise its extensive regulation-making powers concerning governance and operation of the electricity industry, the Commission is now required to conduct a full cost benefit analysis first, to ensure that the regulation-making powers are used as a last resort following a full and proper evaluation of the options.

137 The addition of a statutory requirement to undertake a cost benefit analysis before every recommendation to make regulations is illustrative of the current support for cost benefit analysis in all spheres of government. Cost benefit analyses improve the quality of regulation, plain and simple: and when done properly, a cost benefit analysis will help ensure that regulatory proposals are cost-effective and justified.

This has been recognised by the Commission in its *Guide to the role of the Commerce Commission in making Access Determinations under the Telecommunications Act* (paragraph 109).

138 Given the need for the Commission to demonstrate that the expected benefits of regulating mobile termination rates will exceed the expected costs to a significant degree, Telecom's view is that a full cost-benefit analysis is fundamental.

Conceptual framework for a cost benefit analysis

139 In developing a cost benefit analysis the Commission must first describe what it considers to be the efficient outcomes that are not currently being provided and which regulation could help provide. In doing so the Commission must describe what it regards as efficiency in the level of mobile subscription as well as the level of calls made to/from mobile subscribers.

140 With regards to efficiency in the level of subscriptions, Telecom considers it important that the Commission not adopt the view, as expressed in the UK and Australian regulatory proceedings, that there may be some economic gain from removing a 'cross subsidy' from termination to subscriptions. That view has found its way already into paragraph 171 of the *Issues Paper*:

> *To the extent that retail subscription-related services have been cross-subsidised by above-cost mobile termination rates, this may have led to an over-consumption of the subsidized services. Cost-based mobile termination may reduce or remove the ability to cross-subsidise. As a result, consumers of subscription services would tend to be faced with a truer cost of providing those services, and may adjust their consumption of those services accordingly. To the extent that over-consumption is addressed in this manner under the factual, there may be implications for allocative efficiency.* (Para 171)

141 The Commission is correct to phrase the above as a possibility rather than a fact. The economic definition of a cross-subsidy requires that prices for a service be set below incremental cost.[10] In reality, there is no cross-subsidy in the mobile services market, with all services priced above their incremental cost and all services making a contribution to common fixed costs. As a consequence there is, economically speaking, undersupply of all services and the Commission would be wrong to presume that there is oversupply of subscription services. This is consistent with the Commission's recognition, in paragraph 169, that marginal cost pricing does not generally occur in the telecommunications market.

> *The features of the telecommunications industry make it hard to apply simple concepts of allocative efficiency where efficient prices would be expected to be close to marginal costs. In industries which involve a high proportion of fixed costs, average costs tend to decline across*

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[10] Faulhaber (2002) defines a cross subsidy as follows. "[I]f the revenues of a regulated enterprise just cover total economic costs, then all prices are subsidy-free if the revenues of each service *and each group of* services is at least as great as the incremental cost of that service or group of services". [emphasis his]

the relevant range of output. If average costs are declining, marginal cost will be below average costs. Setting prices at marginal cost would therefore generally result in the business failing to recoup costs.

142 Efficiency in the number of mobile subscriptions requires that mobile operators seek out new subscribers as long as the marginal cost of attracting and serving an additional subscriber (ie, the cost of any network augmentation required to serve calls from/to that subscriber and the retail costs of serving that subscriber) is greater than the willingness to pay for subscription *and* termination services associated with that subscriber.

143 This is a restatement of the standard economic principle that efficiency requires output to expand whenever the marginal value(s) placed on that output are greater than the marginal costs. Because prices for subscription services are already set above the marginal cost of serving an additional subscriber, then, far from creating an economic benefit, increasing subscription prices will create an economic cost.

144 The magnitude of this loss will be equal to the difference in valuation subscribers and callers to subscribers place on the subscription less the marginal (avoided) costs associated with not providing those services (subscription and termination).

145 The same issue can be illustrated in any other two-sided market. For example, the cost of producing and distributing newspaper content to subscribers is also effectively the cost of producing and distributing advertising to subscribers. The cost of attracting an additional newspaper subscriber (eg, by improving newspaper content, adding retail distribution outlets etc) is also the cost of supplying advertising to that additional subscriber. Efficiency requires only that the cost of serving the additional subscriber is less than the combined value to the subscriber and the advertiser.

146 The Commission must not make the mistake of assuming that efficiency can be examined on one side of the market only. Regulation based on such analysis will likely be detrimental to all customers on both sides of the market. To take the newspaper example again, it would be inappropriate to assume that advertisers would be better off if the price of advertising were reduced by regulation. Doing so would likely result in a price increase to subscribers making them worse off. In addition, it is likely to result in a reduction in the number of subscribers, making advertisers (who value access to subscribers) worse off, too.

147 It follows that, as well as efficiency in mobile subscriptions, the Commission must also address efficiency in terms of the number of calls made to/from a subscriber.

148 The Commission has correctly identified that, if pass through occurs, regulatory benefits will exist due to promotion of FTM calls. This benefit exists because the high level of fixed costs in telecommunications, combined with customer aversion to fixed charges, means that retail per minute usage prices are invariably set

above the marginal cost of per minute usage. (Of course, in estimating the value of this benefit the Commission must estimate the extent to which lower termination charges will flow through into lower FTM prices.)

149 The Commission has not identified the economic cost of regulation discouraging mobile originated calls (mobile-to-mobile and mobile-to-fixed). The Commission appears to have assumed that prices for mobile-to-mobile calls would fall if mobile termination charges fell (as these are an input into off-net mobile-to-mobile calls) and that this would provide some economic benefits by bringing prices closer to marginal cost.

150 Telecom disagrees with the Commission's assumption that the impact of regulation would be to reduce the price of mobile-to-mobile originated calls. Telecom firmly believes that competition with Vodafone, in conjunction with customer aversion to fixed up-front charges, will result in lost termination revenues being recovered through higher mobile originated calls. This will clearly result in an increase in the prices of on-net calls and mobile to fixed calls. As these prices are already above marginal cost, then the discouragement of these calls will result in an economic efficiency loss.

151 In relation to off-net calls the impact is more ambiguous, with the need to recover lost termination revenues being offset, at least partially, by the reduction in termination costs incurred in supplying that call. However, the overall effect on mobile originated calls must be positive if lost termination revenue (from MTM and FTM calls) is to be recovered. The Commission's cost benefit analysis must offset the assumed benefit of reduced per call charges for FTM calls against the symmetrical cost associated with higher mobile originated calls.

152 In summary, the Commission cost benefit analysis must give equal consideration and weight to:

- The potential benefits in terms of promoting FTM calls per subscriber by lowering FTM prices towards marginal cost;
- The potential cost in terms of discouraging mobile originated calls by increasing mobile originated calls further above marginal cost; and
- The potential cost in terms of discouraging the level of subscriptions by increasing the overall price of subscription services (including calls) above marginal cost. This cost of reduced subscriptions must include the lost value to both subscribers and callers to those subscribers.

Valuing 'externalities'

153 At paragraph 204 of the *Issues Paper*, the Commission implies that it may be less inclined to place of value on costs associated with 'externalities' than 'direct' benefits in the FTM market:

> *In practice, estimating the cost or benefit of externalities is likely to be extremely difficult and they may not be possible to quantify. Previous CBAs of LLU in New Zealand and other countries have generally not included the value of spillover effects or externalities. However, considering externalities or spillover effects may inform where the Commission settles in a range for the net costs or net benefits. It may move the median of the range or it may extend the range, including in a particular direction where externalities are estimated to systematically move in one direction.*

154 Telecom is unsure how the Commission is considering defining 'externalities' in the current context. Telecom agrees that it is often the case that estimating the value of externalities can be extremely difficult and it is often reasonable to only have qualitative regard to these when carrying out a cost benefit analysis. This is because most externalities, by definition, occur outside a formal market and no market data exists whereby a value can be put on these. Most externalities are not traded.

155 However, Telecom considers that the Commission would be in error to use the above argument to exclude formal estimation of the value of FTM minutes lost as a result of any regulation induced drop in subscriber levels. While it may be possible to construe this cost of regulation as an 'externality',[11] the value of these lost FTM minutes *can be* measured using market data because market participants currently pay for these calls. In fact, precisely the same data on the demand for FTM calls is required to estimate this 'externality' cost as to estimate the 'direct' benefits associated with lower FTM prices.

156 Telecom therefore submits that the reasoning in paragraph 204 does apply to estimating the costs of lost FTM minutes associated with lost subscriptions as a result of regulation of mobile termination.

'Cost' based termination prices

157 In a number of places in the *Issues Paper* it is stated that current mobile termination rates are above 'cost'. The best indication of what the Commission might mean by this is provided by paragraphs 121 to 123 of the *Issues Paper:*

> *Vodafone and Telecom have recently signed a new interconnection agreement that drops the termination rate a little further over several years. However, the reduced mobile termination rates are still significantly higher than the rates proposed by the ACCC and Ofcom. The ACCC's recent draft recommendation is that mobile termination rates in Australia be reduced to 12 cpm (A$) by 2007. In the UK, Ofcom is set a rate of around 6ppm. Even accounting for exchange rates, these are significantly below termination rates in New Zealand.*

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[11] This is an externality in the following sense. A subscriber faced with higher prices may drop their subscription without considering the potential loss to people who would call him. In this sense, the loss to callers is 'external' to the subscriber's decision making process.

> *It follows that termination rates charged by the mobile network operators in New Zealand are likely to be also well above the cost of providing such termination services in New Zealand, unless the costs of mobile termination vary significantly from one jurisdiction to another.*
>
> *In the absence of New Zealand data, a rough proxy could be to take half the cost of the cheapest average off-net mobile-to-mobile calling cost available to an individual under a postpaid plan as an estimate of the upper bound of the cost of mobile termination (since the other half of the cost could be attributed to mobile origination – taking the call from the handset to the POI). Taking Vodafone's Daytime 750 plan27 and applying this approach gives a figure of 18 cpm (excluding GST) for mobile call termination. Cheaper rates are offered for on-net calls (mobile-to-mobile calls within a network) from both mobile operators. Telecom's Team Builder plan28 offers calls between particular mobiles for only 15 cpm – suggesting a marginal mobile termination cost of 7.5 cpm. However, these plans have fixed monthly access charges so it is difficult to calculate what the average per-minute cost would be.*

158 Telecom considers that the above discussion is problematic as there simply does not exist an estimate of the 'cost' of mobile termination that is separable from the cost of subscriptions. Termination can only be supplied if a mobile network can attract subscribers. It is logically impossible for a mobile network to sell termination without already having sold subscription.

159 In economic terms, subscriptions and termination are joint products. This means that both the fixed and variable costs of production are largely common to both services. Once a mobile operator has incurred the costs of attracting a subscriber (eg, network coverage, retail presence, billing etc) then the operator has also produced the ability to sell termination to that customer at practically zero marginal cost (for all but the occasional periods when the network may be constrained). This is similar to other well known jointly produced products.

160 It has been long understood in the economic literature that when two products are jointly produced there is no meaningful way to determine the 'cost' of one service relative to the other.[12]

> *It sometimes happens that two different commodities have what may be termed a joint cost of production. They are both products of the same operation, or set of operations, and the outlay is incurred for the sake of both together, not part for one and part for the other. The same outlay would have to be incurred for either of the two, if the other were not wanted or used at all. There are not a few instances of commodities thus associated in their production. For example, coke and coal-gas are both produced from the same material, and by the same operation. In a more partial sense, mutton and wool are an example: beef, hides, and tallow: calves and dairy produce: chickens and eggs.* ***Cost of production can have nothing to do with deciding the value of the associated commodities relatively to each other. It only decides their joint value****. The gas and*

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[12] Mill, *The Principles of Political Economy.*

> *the coke together have to repay the expenses of their production, with the ordinary profit. To do this, a given quantity of gas, together with the coke which is the residuum of its manufacture, must exchange for other things in the ratio of their joint cost of production. But how much of the remuneration of the producer shall be derived from the coke, and how much from the gas, remains to be decided.* ***Cost of production does not determine their prices, but the sum of their prices. A principle is wanting to apportion the expenses of production between the two.*** *(Emphasis added.)*

161 To paraphrase, when two products are jointly produced, competition will ensure that revenues from both products cover the joint costs of production. However, there is no *a priori* way of telling how much revenue should be recovered from one relative to the other by examining the relative *cost* of producing each product. This can only ever be determined by reference to the relative levels of *demand* for each service.

162 To take a simple example, sirloin and blade steak are examples of jointly produced goods (raising and slaughtering a steer incurring costs that can not be divorced from one another). Sirloin steak sells for more than blade steak in competitive markets not because it 'cost' more to produce but because the level of demand for it is greater.

163 The recognition of joint production costs between subscription and termination means that the Commission must not make the mistake of:

(a) deciding to regulate on the basis that prices are above 'cost'; and/or

(b) attempting to impose a regulated price that is based on a concept of 'cost' where no such concept is economically meaningful.

164 In Telecom's view, the only proper approach is for the Commission to undertake a two-step process: to first determine if regulation is warranted; and, if so, then to determine at what level regulated termination prices should be set.

165 In determining whether to regulate, the Commission should examine the net benefits of a small, but material, reduction in termination rates. A decision to regulate may be justified only if the Commission finds that such a material reduction in termination rates will materially increase economic welfare (having full regard for the risks of regulatory error).

166 If the Commission finds regulation is so justified, it must then regard to all the relevant evidence in an attempt to determine what the optimal regulated price of termination is (again having regard for the risks of regulatory error in moving away from current market prices). In this analysis, there is no economic reason to expect such a price to bear any relation to intuitive concepts of the 'cost' of termination.

167 Telecom strongly urges the Commission to disregard the idea that the ‘cost’ of termination is approximated by half the price of mobile-to-mobile calls. This is no more an economically meaningful definition of the ‘cost’ of termination than it is to argue that the ‘cost’ of blade and sirloin steaks are the same. In both cases it is intuitively appealing to assume that, because there is no obvious difference in production costs between them, they must have the same cost. However, in this case intuition is misleading.

G THE LEGAL FRAMEWORK

Application of section 18

168 Section 18 prescribes the standard by which the Commission is to assess whether or not to recommend that a telecommunications service should be regulated under Schedule 1 of the Act. Telecom agrees that section 18 is a mandatory relevant consideration for the Commission in making its recommendation to the Minister as to whether or not a proposed alternation to Schedule 1 should be made. Indeed it is the only relevant consideration specified by Parliament. Any recommendation to regulate mobile termination must best give, or be likely to best give, effect to the purpose set out in section 18.

169 Section 18 requires the Commission to be satisfied that any regulation it recommends will result in the promotion of competition in telecommunications markets, and that the competition promoted by regulation would be to the long-term benefit of end users. In this submission Telecom has identified how regulation of mobile termination rates will not promote competition in New Zealand markets, and highlighted how such regulation risks harming end-users long term.

Standard to be reached

170 Telecom reminds the Commission at this initial stage of investigation of the high standard of comfort it must attain before lawfully deciding to regulate for the long term benefit of end users.

171 The assessment of whether the benefits of regulation will in fact outweigh the costs is very dependent on the approach taken to market definition and market dynamics, interrelationship between revenue streams, forecasting of revenues, costs, changes in demand, and production innovation. For this reason alone the Commission must be satisfied that its calculation of the benefits of regulation outweigh the costs to a significant degree before recommending the designation of the mobile termination service.

Scope of Commission's investigation

172 On 5 July 2004 Telecom received from the Commission an email attaching a letter sent by TelstraClear to the Commission requesting an expansion of this inquiry to cover some aspects of origination. The Commission's email did not request any response, or indicate the Commission was taking the request seriously. In these circumstances Telecom has not treated origination as being "at issue" in this inquiry.

173 As demonstrated, the mobile services market raises a number of significant issues. This is particularly so given the competitive nature of the mobile services market. Consideration of origination would require that the Commission release a further *Issues Paper* identifying any issues that the Commission perceived in the market, giving parties a proper opportunity to respond to any issues.

Decision-making framework

174 Telecom notes the short timeframe in which industry players have been given to provide meaningful comment to the Commission on a wide range of complex issues.

175 While Telecom appreciates the Commission is somewhat constrained by the statutory framework, Telecom considers that, as a matter of good process, sufficient time must be allowed for the industry to make meaningful submissions on the draft Report. The period indicated in the Commission's proposed timetable – from late August to mid September (a period of three weeks at best) – is unrealistic.

Treatment of wealth transfers

176 In paragraph 48 of the *Issues Paper* the Commission states that it is:

> *Permitted to take into account distributive issues in making its recommendation under the Schedule 3 investigation.*

177 In this section of the *Issues Paper* the Commission essentially repeats the position in the Final Report on the LLU Investigation (paragraphs 34 to 59 of the Final LLU Report). Telecom continues to disagree, and repeats its submissions made in the LLU process (some of which is summarised by the Commission in paragraphs 45 to 54 of the Final LLU Report).

178 The Commission's new position is a reversal of the accepted wisdom, established in a number of decisions over a number of years, that forcibly moving wealth from a firm to consumers does not change net welfare. This recognises that, in economic terms, a dollar in the hands of a producer is worth the same as a dollar in the hands of a consumer. Distributional issues are the stuff of politics, and the Commission has rightly, in the past, not ventured into these areas of political judgment.

179 The orthodox position also recognises the particular difficulties in classifying a producer surplus at any point in time as a detriment. A net welfare approach is the properly conservative basis upon which to assess whether the Commission can be confident that regulatory intervention is desirable.

180 The Commission's position in response is:

180.1 the regulatory context is to be distinguished from the merger context. In the merger context, competitive pressures remain on the producer surplus;

180.2 a number of the designations in the Act call for cost based regulation;

180.3 the Commission will, in any event, make a judgment on the weight it gives distributional issues.

181 These reasons do not support the Commission changing its position on such a fundamental aspect of any inquiry into whether regulatory intervention should occur.

182 The distinction the *Issues Paper* attempts to draw between merger and regulatory contexts, based on the degree of competition expected in the counterfactual, is illusory. The key decisions establishing the neutrality of producer surplus were made at a time when the merger threshold was one of dominance. Any public benefits analysis occurred only in the context of an authorisation, when it was either acknowledged or found that dominance would result. Given the high threshold required by the dominance standard, whereby a firm could unilaterally set price or quantity, this necessarily assumed very little competitive pressure into the future. At no point was it suggested that this required a reversal of the position on producer surplus.

183 In the regulatory context, on the other hand, the Commission does not go so far as to say no competitive pressure is likely in the counterfactual. The Commission anticipates conducting a cost benefit analysis of regulatory intervention when some competitive pressure is present in the market.

> *The threshold test for intervention by way of regulation requires an acceptance that competitive forces do not operate fully in the relevant market* [paragraph 49]

184 This describes equally well a market in which dominance has been established, which was the merger context in which the neutrality of producer surplus was determined. The distinction the Commission attempts to draw does not exist.

185 The Commission also refers to the existing designations establishing cost-based regulation, and refers to clause 3(1)(b) of Part 1 of Schedule 1 of the Act. This obscures the fact that the question being addressed is whether regulatory intervention should occur. The proper answer to that question is a net welfare analysis. References to existing regulation only underline the point that distributive issues are political ones.

186 Finally, the Commission states it will move these issues to a qualitative and non-transparent exercise of weighting. Telecom submits this is not sufficient. The Commission has not made supportable arguments justifying a reversal of its position on the neutrality of producer surplus, and in these circumstances the Commission should not include these issues in its analysis.

187 The orthodox treatment of producer surplus as irrelevant to the cost benefit analysis of regulatory intervention has recently been endorsed by the Minister of Energy in the Gas Pipelines Inquiry. In that context, section 52 of the Commerce Act requires the Commission to report on the net benefit to acquirers, a test that treats producer surplus as relevant. Officials have expressed dissatisfaction with the test, and a review of the test is underway. For the purposes of the Gas

Pipelines Inquiry the Minister has requested that the Commission report also on a net welfare basis. This is consistent with the approach taken by the government to the Airfields Inquiry, where the government's decision was made on the basis of a net welfare analysis.

188 The Commission's proposal to treat producer surplus as relevant is at odds with the net welfare analysis used by the government to make decisions on regulatory intervention, and the reasons given for changing the position on producer surplus are not good ones. Telecom submits that the proposed approach runs the very real risk of involving the Commission in political judgments, to the long term detriment of the Commission and telecommunications markets.

189 If, despite these risks, the Commission proceeds with an "acquirers" analysis, Telecom submits the Commission should also report on a net welfare basis. This would be consistent with the approach requested by the government for the purposes of the Gas Pipelines Inquiry, and consistent with the Commission's Final LLU Report.

H TELECOM RESPONSE TO PERTINENT QUESTIONS IN ISSUES PAPER

Q#	Question	Answer
2	Do respondents have any comments on the legal framework as set out by the Commission?	Yes. See Part G.
3	Do respondents have any concerns with the Commission's proposed decision making framework?	Yes. See Part G.
4.1	(a) Has the Commission correctly defined the relevant wholesale and retail markets for its Schedule 3 investigation?	No. See Part C.
	(b) Is there any evidence that there is not a distinct market for the termination of mobile calls?	Yes. See Part C(1).
4.3	(a) How do respondents view the retail fixed-to-mobile market?	The relevant market is the fixed line toll calling market. See Part C(2).
	(b) What evidence is there that competition in this market is limited?	None. Competition is alive and well, as evidenced by the choice of suppliers, the intense rivalry between those suppliers, and the differing toll and FTM rates offered by the different suppliers. See Part D(2).
	(d) How would a reduction in mobile termination rates be likely to affect this market?	A reduction is highly unlikely to affect this market due to the particular demand characteristics driving FTM pricing. See Part D(2).
	(e) Why has the residential retail cost of fixed-to-mobile calls charged by Telecom and TelstraClear remained at 71 cpm since these calls were first offered?	Because of the demand characteristics driving FTM pricing. See paragraphs 123-126.
	(f) Since residential customers can obtain retail rates up to 42 percent cheaper than the standard 71 cpm rate charged by Telecom and TelstraClear, why don't more residential customers switch to providers offering a substantially cheaper service?	See paragraphs 123-126.
5.1	(a) What do respondents think is the likely counter-factual?	A continuation of the intense rivalry that has marked the mobile services and fixed line toll

Q#	Question	Answer
		calling markets over the past 5 years. See Part D.
	(b) How do respondents expect relevant telecommunications markets to evolve in New Zealand over the next few years?	See Part D.
5.2	(a) What do respondents think is the likely factual?	See Part E.
	(b) If the mobile termination rate was reduced significantly, why wouldn't this decrease be passed through by retailers of fixed-to-mobile calls?	Because of the demand characteristics driving FTM pricing. See paragraphs 123-126.
	(d) Why haven't recent reductions in mobile termination rates been passed through to retail fixed to-mobile prices?	Because of the demand characteristics driving FTM pricing. See paragraphs 123-126.
	(g) Would reductions in mobile termination rates lead to an increase in mobile subscription charges?	This is highly likely. Where one revenue stream is compulsorily reduced, another must make up the difference in a highly competitive market. See paragraphs 32-37.
6.1	(a) Are high charges for mobile termination being used to subsidise other parts of the mobile business in a way that increases subscription?	Yes. See paragraphs 32-37.
	(g) What is considered to be a reasonable WACC for a mobile network?	For the purpose of considering the issues raised in *Issues Paper*, Telecom suggests a broadly indicative CAPM-based WACC for mobile termination be used. Telecom proposes the following assumptions: 1. the WACC and CAPM formulae and definitions previously used by PwC in its 2001-2002 and 2002-2003 TSO WACC calculations; 2. a current long term government bond yield of 6.4% (average annualised yield on the April 2015 government bond over the month of June 2004);
		3. the investor tax rate (28%) previously used by PwC in its 2001-2002 and 2002-2003 TSO WACC calculations; 4. the gearing level (30%) previously used by

Q#	Question	Answer
		PwC in its 2001-2002 and 2002-2003 TSO WACC calculations; 5. the debt margin (1.7%) previously used by PwC in its 2002-2003 TSO WACC calculation; 6. the tax adjusted market risk premium (7.5%) previously used by PwC in its 2002-2003 TSO WACC calculations; and 7. the mobile asset beta range (0.95 to 1.13/1.14, say, 0.95 to 1.15) derived from the comprehensive telecommunications industry segmental beta analysis undertaken by PwC in its advice to Telecom and submissions to the Commerce Commission in respect of the 2001-2002 TSO WACC. Drawing on the assumptions above, but subject to the caveats noted above, Telecom therefore estimates that as at 30 June 2003 a broadly indicative CAPM-based WACC estimate for a mobile network was in the range 12% to 13.5%. This does not include an increment for asymmetric risks and other risks not captured in a CAPM framework. If a point estimate were required it should come from the top end of the range (to avoid the risk of under investment if the regulatory WACC is set too low).
6.4	(a) How do respondents think that existing regulatory decisions are likely to impact on market evolution and the need for mobile regulation?	See Part E.
	(b) Do respondents have views at this stage on whether any mobile termination regulation should be temporary or permanent?	The mobile services and fixed line toll calling markets should not be regulated.
6.5	(a) What are respondent's views on the need for a full cost benefit analysis?	Conducting a full cost-benefit analysis is fundamental when considering the need for regulation. See Part F.