

**VODAFONE NEW ZEALAND LIMITED
SUBMISSION TO THE
COMMERCE COMMISSION**



**Telecommunications Act 2001: Schedule 3 Investigation
into Regulation of Mobile Termination**

Issues Paper

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Public version

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Executive Summary

Vodafone is the leading challenger to Telecom in the telecommunications sector. It has a track record of making substantial investments in building modern infrastructure in New Zealand.

Vodafone has delivered, and continues to deliver, customer choice, competition and all the advantages of mobile services and products so essential to businesses and consumers in today's (and tomorrow's) world.

This submission is in response to the Issues Paper released by the Commerce Commission (the **Commission**). That paper was predicated on concerns that the price of calls from fixed lines to mobile handsets is too high. It reflects the Commission's interest in identifying a regulatory intervention that would give effect to the purpose of the Telecommunications Act 2001 (the **Act**), which is to promote competition for the long-term benefit of end-users.

Vodafone considers that the market definition suggested by the Commission of call termination on each individual mobile network is incorrect. Mobile companies do not sell only mobile termination services. It would be inefficient to supply only that service. Rather mobile termination is one of a range of services offered in the broader mobile services market. The mobile services market is highly competitive with special offers, advertising aimed at winning new customers, high churn rates, substantial market growth and investment in innovative new services. Regulation of the mobile services market will not promote competition for the long-term benefit of end users. The Commission should therefore recommend no regulation of the mobile services market.

Regulation of mobile termination rates is also unnecessary as mobile termination prices continue to fall as a result of commercial negotiations and market developments. We note that despite the significant 30 per cent decline in mobile termination prices during the past 5 years retail fixed to mobile call prices have failed to be competed downwards in the residential market. Previous mobile termination rate reductions have not been passed through to New Zealand consumers by Telecom or TelstraClear.

Vodafone considers that to the extent it is warranted at all regulatory attention could better be focussed on the consumer concerns that have given rise to this investigation – namely sustained high retail prices for fixed-to-mobile calls – particularly for residential consumers. Vodafone has a clear view of the market definition in the upstream wholesale mobile market. We will be giving further consideration to the issues involved in the retail fixed market during the course of this investigation.

If the Commission decides to recommend regulation of termination of calls on mobile networks then it must demonstrate that competition will be promoted and that there will be long-term benefits for end users arising from that increased competition. A cost-benefit analysis will be necessary to demonstrate this. If consumers are to gain any benefits from regulation of mobile termination rates then some assessment of likely passthrough of these reductions must be made by the Commission. Without adequate assurance that termination rate reductions will be passed through to consumers the Commission would simply be providing a wealth transfer from Vodafone to Telecom and TelstraClear which would not promote competition or provide any long-term benefits for end users.

As the leading challenger to Telecom, Vodafone is willing to work with the Commission to ensure that competition is promoted in the long-term interests of end users.

However, while we agree that end-users could benefit quite materially if the retail market for fixed-to-mobile calls were to become more competitive, we reject the proposition that cutting mobile termination rates will promote competition in this market. Lowering termination rates will not promote competition in this market. For this reason, regulating mobile termination will not give effect to the purpose of the Act therefore, regulation is inappropriate.

We note that the Issues Paper refers to recent regulatory decisions in Australia and in the United Kingdom. It is important that the Commission recognise two special features of the New Zealand environment which limit the relevance of these other decisions. The first is the unique structure of our mobile industry which has two full service mobile networks, one of which is integrated into the fixed-line business of Telecom. This market structure has special implications for the effect of regulating mobile termination rates. In particular, it can be shown that the integrated firm would be advantaged relative to the mobile-only firm if termination rates are reduced through regulation. Moreover, this advantage is greater the more the integrated firm (Telecom) can resist passing the mobile termination rate cut through to end-users. The fact that the integrated firm (Telecom) is also the dominant retailer of fixed-to-mobile calls in New Zealand reinforces its incentive to resist pass-through.

The second special feature of the New Zealand environment is the legal context within which the Commission operates. The Act places much more emphasis on the competitive process than is the case in other jurisdictions. For example, the Commission cannot cut end-user prices directly and nor can it intervene in any other way in retail markets. Under the Act, the Commission cannot recommend regulation of a service unless it is satisfied that doing so will promote competition. Additionally, that promotion of competition must deliver long-term benefits to end users. The Act was deliberately designed this way, and was described by the Minister as providing as much market as possible, and as much regulation as necessary.

1. General comments

1.1 Introduction

This submission on the Issues Paper “Telecommunications Act 2001: Schedule 3 Investigation into Regulation of Mobile Termination” (the **Issues Paper**) issued by the Commission in June 2004 is made by Vodafone New Zealand Limited (**Vodafone**).

In this section of this submission, we provide our general views on the issues that are set out in the Issues Paper as well as our reasoning behind these views.

In section 2, we address several critical issues that we believe the Commission has failed to adequately consider in the Issues Paper.

In sections 3 to 9 of this submission, we provide our answers on specific questions set out in the Issues Paper. These paragraphs follow the order of the chapters in the Issues Paper.

While Vodafone does not provide in this submission its views on all of the issues raised, we reserve the right to submit our further views on any of the issues set out in the Issues Paper should it be necessary in the future.

1.2 Need to understand and address the real issues related to fixed-to-mobile calls

Vodafone understands that some concerns have been raised regarding the prices for retail fixed-to-mobile calls. In its announcement to investigate mobile termination rates the Commission specifically refers to complaints it has received regarding the lack of competition in the mobile termination market resulting in unreasonably high charges for fixed-to-mobile calls. We are concerned however that both the “complainants” and the Commission have erroneously established a causal link between the mobile termination rates negotiated between fixed and mobile network operators and the retail prices for fixed-to-mobile calls that are charged by the fixed line operators. Vodafone notes that mobile termination rates have declined over 30 per cent in nominal terms over the last five years. However, as noted by the Commission, fixed line operators have maintained high fixed-to-mobile retail rates for the average residential customer. We discuss this further in section 7 of this submission.

TUANZ in particular has been outspoken in demanding lower fixed-to-mobile prices for end users.¹ Ernie Newman, the CEO of the Telecommunications Users Association, has identified the price of fixed-to-mobile calls as the major concern in this area. In a recent TUANZ Topics article, Mr Newman wrote:

¹ TUANZ Topics, June / July 04, pg 5, “The costs of calls to mobile phones could be coming down, thanks to TUANZ; The Commerce Commission has announced that it will investigate whether or not mobile phone call termination rates should be regulated. It has acted after TUANZ complained that lack of competition in the mobile termination market – the fees mobile phone companies charge other carriers to terminate calls on their networks – means charges for fixed-to-mobile calls in New Zealand are unreasonably high”

“Which part of your annual telecommunications spend is showing the biggest percentage increase? Increasingly, users locally and globally are identifying the burgeoning cost of fixed-to-mobile calls”²

Vodafone is also concerned to ensure that its customers and New Zealanders generally fully enjoy the benefits that modern, competitive telecommunications services can deliver. Accordingly, we are willing to work with the Commission to identify, progress and help to resolve the issues involved in this matter.

1.3 Vodafone – leading challenger prepared to take risk of heavy investment and compete against Telecom

Vodafone’s well-known view is that the customer, or end-user, is paramount. As the leading challenger in the telecommunications industry Vodafone is committed to customers. Our track record is one of being willing to invest substantial capital into building New Zealand’s infrastructure.

Of the four companies that have held rights to cellular spectrum in New Zealand, Vodafone has been the only licence-holder prepared to take on the risks of commercial entry against Telecom in the telecommunications market in New Zealand. Since it acquired the business of BellSouth in 1998 Vodafone has focused its efforts on investing in expanding coverage of its own GSM and GPRS networks and winning over customers – rather than relying on access to infrastructure of other players. Indeed, until Vodafone’s entry the mobile market was characterised by almost complete dominance by Telecom Mobile. Over the past over six years we have gained over 50 per cent of the retail market share in mobile services.

1.4 Growing effects of convergence in a rapidly changing industry

While we are proud of the success of our efforts to date, we recognise that in the dynamic mobile industry past efforts are no guarantee of future success. With technological convergence, the barriers between fixed and mobile services are rapidly breaking down. Customers are more concerned with the services available and the prices they pay – rather than whether the service arrives via copper, fibre, cellular or satellite technologies. This presents significant opportunities and risks to investors. In this context, we believe the best customer outcomes will occur where the market is allowed to develop commercially without the distortions that regulatory intervention will necessarily impose.

In the broader New Zealand telecommunications industry, Vodafone’s market share is less than 20 per cent according to the Commission’s own definition of liable revenues.³ We note that due to the cost allocation method adopted by the Commission, Vodafone believes that this figure is overstated and that around 10 percent is a more accurate reflection. Telecom continues to control over 70% of the New Zealand industry revenues. If Vodafone is to continue to represent the leading competitive challenge to Telecom in the New Zealand telecommunications industry then regulatory policy should not put barriers in the way of that challenge. Promoting efficient competition for the long term benefit of end users must be

² TUANZ Topics, June / July 04, pg 23, *A challenge for mobile operators*

³ TSO Determination for 2001/02 year.

paramount. In particular, those players that have committed to significant investment in the infrastructure that underpins the telecommunications industry should not be regulated simply for the benefit of those who have chosen not to.

1.5 Further new major capital investment by Vodafone

Consistent with this, Vodafone is currently undertaking a very large project to design and roll out a brand new third generation mobile network in New Zealand. Vodafone's 3G network is costing us [**RI**].

The new infrastructure will provide further capability to introduce new retail services for customers. The benefits to end-users will be substantial.

1.6 Presence of integrated carriers

Unlike the United Kingdom, in the New Zealand market there is no clear structural separation between fixed network operators and mobile network operators. This allows carriers that were integrated operators at the time of privatisation, such as Telecom (or Telstra in Australia), to create a situation where bundled pricing and product offerings are the norm and where pricing arrangements between various elements of the bundles are, at best, not transparent, and give those players advantages in more competitive markets.

Pure-play mobile operators in calling party pays (CPP) countries, have only three sources of revenues:

- subscriptions;
- customer calling revenues; and
- wholesale (interconnect) revenues.

New regulatory interventions that negatively impact these revenues will undoubtedly have an effect on investment and on the ability of pure-play mobile operators (including other new mobile-only entrants) to compete against the integrated operator. The real regulatory challenge is in dealing with the problems associated with the integrated network operator.

1.7 Absence of a causal link to high fixed-to-mobile prices

The concerns that prompted this investigation by the Commission centred around the price of fixed-to-mobile calls. Vodafone is concerned that the Issues Paper does not contain any hard evidence of mobile termination rates being a cause of high prices for fixed-to-mobile calls. On the contrary, the evidence points in the opposite direction, that despite previous reductions in the mobile termination rates charged to fixed network operators in New Zealand, the prices for fixed-to-mobile calls have remained stubbornly high – particularly for the majority of end users who are residential customers.

If the current concern is with the retail price paid by users for fixed-to-mobile calls, then the Commission should be closely examining the retail prices charged by fixed operators, and how they are comprised.

On the basis of section 18 of the Act, it is necessary for the Commission to be concerned with the competitive nature of the services offered to end-users in New Zealand. Indeed the Commission's regulation of Telecom's retail service on a wholesale basis is a recent attempt to address this issue – at least in as much as the prices relate to the corporate fixed-to-mobile calls market. Residential end users continue to be a source of large margins for the established fixed network operators.

Vodafone emphasises to the Commission that the current course of action in investigating mobile termination rates, can only be justified, if at all, if it promotes competition and provides long-term benefits to end users.

1.8 Vodafone's contribution to New Zealand

Since entering the New Zealand market, via the purchase of BellSouth in 1998, Vodafone has made huge capital investments in infrastructure development. Vodafone has plans to continue this trend and we have given clear market signals regarding our impending 3G network rollout. Our presence has facilitated competition in the mobile market and convergent ITC services. We help generate local jobs and skills both for our own people and with our partners and suppliers. Globally, the New Zealand business is seen as a centre of excellence and is a business that is noted for its innovative flair.

In comparison to other investors in the New Zealand mobile market, Vodafone has, by far, invested most heavily in New Zealand. We note that the data used to produce the below graph were compiled by Vodafone. We have used internal Vodafone data for the Vodafone information and for information on other operators Vodafone has relied on publicly available sources of data.

Graph to show capital expenditure in mobile in New Zealand

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RI

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2. Critical issues

In this chapter, we address several critical issues that we believe the Commission has failed to adequately consider in the Issues Paper. We believe that when the Commission does take these issues properly into consideration, they will either decline to recommend regulation of mobile termination rates or will recommend a deferral of regulation.

2.1 Promotion of competition is the prime consideration

As mentioned elsewhere in these submissions, the purpose of regulation under Part 2 and Schedules 1 and 3 of the Act is to *promote competition* in telecommunications markets for the long-term benefit of end-users. Section 18 of the Act makes this clear.

The immediate purpose of regulation under the Act is therefore to promote competition. The promotion of competition is the vehicle for delivering the benefits. It is expected that competition in markets will lead to long-term benefits for end-users.

There may be a number of ways of promoting the long-term benefit of end-users by means of regulation; however the Act only permits one way. This is to do so by means of promoting competition in telecommunications markets.

The attached Covec paper has identified the following mechanisms by which regulation of a mobile termination service might in principle promote competition:

- elimination or reduction of barriers to entry;
- reduction of product differentiation or brand loyalty;
- elimination or reduction of switching costs;
- sustainably increasing the number of firms;
- providing consumers with better information.

Covec is of the view that regulating mobile termination rates will not materially enhance competition through any of these channels.

Vodafone notes in particular that the barriers to entry in fixed-to-mobile retailing were all but eliminated with the passage of the Act which designated the wholesaling of fixed-to-mobile calls originating in Telecom's network and pre-selection of fixed-to-mobile calls. Regulating mobile termination rates will not make any material difference to barriers to entry.

If regulation caused consumers to view competing fixed-to-mobile offerings as closer substitutes than is currently the case, product differentiation would be reduced. This would enhance competition in the retail markets for fixed-to-mobile services. However, Vodafone cannot see how regulation of mobile termination

rates would cause consumers to regard low-priced fixed-to-mobile services as a better substitute for high-priced service.

Nor can we believe that regulation of mobile termination rates would materially reduce the costs of switching fixed-to-mobile suppliers or improve the benefits of doing so. The persistent gap between posted fixed-to-mobile prices suggests that there are already substantial benefits from switching away from the dominant suppliers of fixed-to-mobile calls, and the fact that this does not occur speaks volumes for the way consumers view the costs of switching.

In order for regulation to sustainably increase the number of firms supplying fixed-to-mobile service, it would need to materially decrease average costs and/or expand the size of the market. However the available evidence strongly suggests that end-users tend to buy fixed line services as a bundle. The average cost curve that is relevant to determining the sustainable industry structure therefore shows the average cost of the bundle of fixed line services, rather than just fixed-to-mobile service. We find it difficult to believe that reducing the cost of mobile termination will materially affect the cost of supplying the full bundle of fixed line services to the extent that another full service fixed line service provider will be accommodated.

In the Issues Paper, the Commission floated the idea that consumers might be better informed about the fixed-to-mobile market if termination was designated. The attached Covec paper responds to this idea as follows:

This seems rather implausible. In the first place, it assumes that buyers are currently ignorant of the significant variation in prices that have prevailed for several years, despite the attention that has been drawn to these prices by TUANZ, the Consumer's Institute and the news media. Secondly, it requires investment in advertising by those firms least able to pay; the fringe players offering low-cost alternatives. Additionally, it requires that this advertising draw attention to the price advantage enjoyed by the small players, which invites a competitive response by Telecom and TelstraClear that would narrow or eliminate whatever advantage the small players currently enjoy. In our view, a more likely strategy for the small players is to devote more effort to their existing modes of competition.

The attached paper from Frontier Economics also considers this issue of whether regulation of mobile termination services would promote competition and they find that it will not.

Having considered the possible ways in which designation might promote competition in the fixed-to-mobile retail markets, Vodafone has been unable to identify any likely channel. However such a designation is likely to adversely affect competition and the consequent benefits end-users receive in the market for mobile services. Indeed, it is difficult to see how regulated mobile termination rates will do anything other than enhance Telecom's market position in mobile telecommunications. It would significantly reduce the revenues of Vodafone and would at the same time reduce Telecom's own operating costs by reducing out-payments for termination of mobile calls. On top of that, Telecom's position would be further strengthened if it is able to retain any increased margins derived from reduced mobile termination rates – without having to pass them through to end users. Such an outcome would have a negative effect on competition in the telecommunications industry generally and particularly in the mobile sector, and it would be to the detriment of end users' long term interests.

We return to this central issue of promotion of competition in telecommunications markets on a number of occasions throughout these submissions.

2.2 Effectiveness of existing interventions

Vodafone believes the Commission has not given sufficient weight to the fact that it has recently given a determination in relation to the wholesaling of fixed-to-mobile calls that originate on the Telecom network⁴.

This determination is likely to have a competitive impact on the market for fixed-to-mobile calls. It will allow the entry of non-facilities based service providers and will enable existing carriers that participate in that market to potentially compete more effectively with Telecom.

Further, with the introduction of fixed to mobile preselection in August 2001, the Commission acknowledged that entry conditions in relation to F2M calls have improved⁵. On top of this, the Act contains a designated multi-network service "Telecom's fixed PSTN to mobile carrier pre-selection service". We are not aware of any application having been made yet in relation to this service, but we also consider this service has reasonably strong potential to further improve competition in the market for fixed-to-mobile calls.

The wholesale determination and the above developments around fixed-to-mobile preselection will effectively eliminate the barriers to entry into the fixed-to-mobile retail markets. We would expect to observe steady growth within the competitive fringe in these markets. See our answer to question 6.4(a) for further discussion of the likely competitive effects of these interventions.

Vodafone believes that these existing regulatory interventions and market developments should be given time to take effect before the Commission considers whether to regulate mobile termination rates.

After all, to the extent that regulating mobile termination rates would promote competition in a market, it appears the Commission sees that increase in competition occurring in the market for fixed-to-mobile calls. It seems to us that further regulation would amount to a premature intervention when the Act already contemplates mechanisms specifically designed to achieve the competition objective envisaged by the Commission in the Issues Paper.

⁴ Determination on the TelstraClear Application for Determination for "Wholesale" Designated Access Services, Decision 497, 12 May 2003

⁵ Ibid, paragraph 447

3. Chapter 1 – Introduction and process

3.1 Concern with the timeframe

The Commission's proposals for the investigation, and the stages involved, appear to be in accordance with the procedure set out in Schedule 3 of the Act.

Vodafone understands the Commission is bound by the timeframes specified in the Act, however Vodafone emphasises that, for an investigation of this complexity, the timeframes are very tight. The Commission has the ability under the Act to notify the Minister of Communications about an inability to meet the deadline for preparing and delivering its report to the Minister.

Vodafone supports the Commission's statement in paragraph 29. The Act contemplates that the Commission will not always meet the timeframes specified for investigations into changes to Schedule 1.

Where the Commission has made reasonable efforts, but is unable to prepare its final report within 120 working days of giving notice of its investigation, the Commission must give written reasons to the Minister of Communications (section 5 of Schedule 3). Although the Commission must meet the timeframe for production of its draft report, Vodafone strongly urges the Commission to take the time that it needs to produce the final report. This is a critical and complex investigation and the Commission must not unduly rush the process of completing its investigation.

Vodafone will be using its best endeavours to fully present its views on the issues throughout this process; however, on the basis of the very short timeframes currently allowed to respond to this Issues Paper and the draft report, this may not always be possible.

3.2 Reliance on overseas regulatory decisions

Vodafone notes that, throughout the Issues Paper, the Commission appears to place considerable significance on the recent decisions by regulators in Australia and the United Kingdom regarding the regulation of mobile termination services.

Vodafone believes that, in applying the legal framework which governs the Commission's investigation, it is very important for the Commission to have a clear understanding of the ways in which the New Zealand telecommunications regulatory regime differs from the Australian and United Kingdom regimes. In particular, the primary test for the imposition of regulation is different in each jurisdiction, and this must be taken into account when considering the issue in New Zealand. This understanding is important because the decisions of the other regulators must be considered in terms of the legal context in which they were made.

The Commission's decision whether or not to recommend the imposition of regulation is the object of the current investigation, and as such is of fundamental importance. We expect the Commission to make its recommendation on the basis of an informed understanding of the specific features of the New Zealand legal setting, and how they are different to those in other jurisdictions. We would not

expect the Commission to rely on the conclusions of other regulators without first considering how the decision can be applicable in the New Zealand legal, economic and market context.

We are also highlighting this because we are concerned that the Commission will rely too heavily on the conclusions of these regulators, and in many cases this is not likely to be an appropriate adoption of precedent by the Commission.

The legal doctrine of precedent says that a conclusion should only have force of precedent in a different setting where both the factual and legal context were the same or substantially similar. A conclusion can not be taken out of context, because decisions are normally made on the basis of the particular circumstances and within particular frameworks. To the extent the contexts differ, reliance on the conclusion must be reduced.

To assist the Commission's understanding, Vodafone sets out in Appendix A details of the different legal contexts in which mobile termination services have previously been regulated in Australia and the United Kingdom.

Our focus is on the recent decisions made by regulators in Australia and the United Kingdom on mobile termination services, as these decisions are referred to most frequently by the Commission in the Issues Paper.

The decision-making frameworks that were required to be applied by the ACCC, OFCOM and the Competition Commission in the UK in the consideration of aspects of the regulation of mobile termination services were fundamentally different to the framework that must be followed in New Zealand by the Commission.

The key test differs in each case, and in addition to this, the sequence that must be followed in applying the framework is different.

In particular, the decisions made by the ACCC, OFCOM and the Competition Commission about mobile termination services were not made primarily on the basis of promoting competition:

- In Australia, the ACCC was primarily concerned with the promotion of the long-term interests of end-users (LTIE) (and promotion of competition was only one of several factors that merely had to be considered when assessing the promotion of LTIE).
- In the United Kingdom, OFCOM were primarily concerned with whether participants in the relevant market had Significant Market Power (SMP). The services of participants found to have SMP can be regulated.
- Finally, the Competition Commission was solely concerned with the public interest.

In contrast, the Commission is required under sections 18 and 19 of the Act to consider first whether the regulation of mobile termination services would promote competition. Then, if so, the Commission must consider whether that promotion of competition would deliver long-term benefits to end-users.

Accordingly, the Commission is following a different test and a different sequence of application to the other NRAs.

Apart from the differences in the primary test to be followed in each jurisdiction, the significant difference in the structure of the New Zealand market compared to that in the United Kingdom (the separation of mobile and fixed operators for instance) will mean that the same regulatory intervention will have profoundly different consequences if applied in New Zealand.

As a general point, the Commission should be cautious about relying too closely on the decisions of overseas regulators. The New Zealand market has unique characteristics such as sparse population, challenging terrain and a low population.

Vodafone acknowledges that, some aspects of the decisions in Australia and the United Kingdom may have some relevance to this investigation, as elements of these decisions have common application in New Zealand. We refer to these elements in this submission.

3.3 Transparency and confidentiality

Vodafone agrees that an open and transparent process is the best way to carry out this investigation (paragraph 31). Vodafone also agrees that public scrutiny of submissions will be the best way to test all the information (paragraph 32).

However, Vodafone also believes that the particular topic under investigation has commercially sensitive elements. As a result, the needs of carriers to confidentiality in the process are also very important.

Accordingly, Vodafone supports the Commission's steps to create the Confidentiality Order under sections 9(6) and 15(i) of the Act to apply to confidential information provided by parties making submissions in this proceeding.

4. Chapter 2 – Legal framework

Question 2 – Do respondents have any comments on the legal framework as set out by the Commission?

The Commission is currently charged with carrying out an investigation which will result in a recommendation by the Commission either to change or not change Schedule 1 of the Act. As such, the Commission's investigation is directed towards the Commission making a decision.

The focus of Vodafone's submission in this section 4 is twofold:

- first, we clarify the Commission's interpretation of section 18; and
- secondly, we discuss efficiencies and distributive issues and other constraints that will apply to the Commission's decision making criteria.

4.1 Commission's interpretation of section 18

As a general point in relation to the applicable legal framework, Vodafone needs to clarify the Commission's interpretation of section 18 in the context of this investigation.

From an interpretive perspective, section 18 can be seen to have three distinct functions:

- first, section 18 provides the purpose of certain parts of the Act (including Part 2 and Schedule 3) ;
- secondly, section 18 must be taken into consideration when the Commission makes any decision or recommendation under the Act, as required by section 19(b); and
- thirdly, the Commission must make the recommendation that it considers best gives, or is likely to best give, effect to the purpose set out in section 18, as required by section 19(c).

We are concerned that the Commission is not applying the statutory requirements of section 18 and 19 correctly.

As mentioned above, the purpose of regulation under Part 2 and Schedules 1 and 3 of the Act is to *promote competition* in telecommunications markets, for the long-term benefit of end-users.

The immediate purpose of regulation under the Act is therefore to promote competition. The promotion of competition is the vehicle for delivering long-term benefits for end-users.

There may be a number of ways of promoting the long-term benefit of end-users by means of regulation; however the Act only permits one way. This is to do so by means of promoting competition in telecommunications markets.

Accordingly, the Act does not permit the Commission to attempt to achieve long-term benefits for end-users by any other means than promoting competition. For example, regulation of an input cost at the wholesale level may achieve a simple reduction in retail prices which may arguably be of benefit to end-users. But this alone would not be sufficient under the terms of the Act. Regulation must promote competition in a market. If regulation does not achieve this objective, then the Act does not allow it.

It is clear that the ethos of section 18 is that the best way to achieve sustainable long-term benefit is to promote competition in the relevant telecommunications market.

The Issues Paper includes much discussion on purported end-user benefits arising from regulation of mobile termination rates, but there is very little discussion on the promotion of competition in telecommunications markets that regulation would be expected to bring about.

In order to apply the statutory requirements correctly, the Commission must ask itself whether the regulation of mobile termination rates would promote competition in a relevant telecommunications market. If it will not promote competition in any telecommunications markets, then the Commission must recommend that there be no regulation. If it will promote competition in any telecommunications market, then the Commission must ask itself whether this competition will be for the long-term benefit of end-users. In this respect, the Commission can only consider the benefits that arise out of that promotion of competition and can not consider any other benefits that may arise out of regulation.

Efficiencies must also be considered in determining whether regulation will promote competition in telecommunications markets for the long-term benefit of end-users (section 18(2)). The existence of efficiencies can therefore be seen as a tool available to the Commission in determining whether competition will be promoted.

This analysis is fundamental, yet has not been given the full attention in the Issues Paper that is required by the Act. The promotion of competition is the primary consideration of the Commission under this investigation.

4.2 Efficiencies, distributive issues and other considerations

(a) *Efficiencies*

The Commission is correct to say that the efficiencies that will result, or will be likely to result, from its act or omission must be considered (paragraph 46). Efficiencies are mandatory considerations for the Commission.

The Commission is correct that “efficiencies” are not defined in the Act.

Vodafone agrees that the Commission will need to take into account a full range of efficiency considerations relevant to the matter currently under investigation, including allocative, productive and dynamic efficiency (paragraph 46).

Of the types of efficiency considerations, Vodafone believes that dynamic efficiency must hold the greatest weight in the decision making process. This is consistent

with the focus on the *long-term* interests of end-users as referred to in section 18, and is especially important given the unique features of the telecommunications industry.

Vodafone agrees that the Commission is not limited to considering efficiencies to the exclusion of other relevant considerations when considering whether regulation will promote competition for the long-term benefit of end-users.

The Commission is also able to take into account other relevant factors in addition to the efficiencies that will, or will be likely to result when it comes to determining whether regulation will promote competition for the long-term benefit of end-users.

However, Vodafone strongly believes that the Act *does* direct the Commission as to the weight that efficiencies should be given, and that other considerations are secondary to efficiencies.

Vodafone disagrees with the Commission's statement in paragraph 47 that "...[t]he Act does not direct the Commission as to the weight that it should give to efficiencies, as opposed to other considerations. That is a matter for the Commission to consider."

When interpreting section 18 in context, it can be seen that efficiency is a key consideration. While there is no limit on taking other relevant factors into account, considerations which were not written into the Act can not be read as having equal importance to those which were expressly set out by the legislature. The fact that the efficiency considerations are (a) mandatory, and (b) expressly stated, strongly indicates that they have a greater importance than any other considerations in this context.

(b) *Distributive issues*

Vodafone understands that the phrase "distributive issues" as used in the Issues Paper refers to transfers of economic surplus between producers and consumers. The Commission attempts to justify taking distributive issues into account in the Issues Paper.

(i) *Analysis of section 19(b) incomplete*

We note that the Commission's analysis of the applicability of section 19(b), in paragraph 50, is incomplete. Section 19(b) does refer the Commission to the matters set out in Schedule 1 regarding the applicability of section 18, however for the purposes of mobile termination as a new designated or specified service, there are presently no such additional matters. There may be, if the service is regulated, but this will be set out in the new wording to be inserted into Schedule 1.

Indeed, the reference to these additional matters in section 19(b) is to those additional matters listed as such in each of the regulated services themselves (for example, see "Interconnection with Telecom's fixed PSTN").

Further, the references in paragraph 50 to profits in excess of a reasonable return in clause 3(1)(b) of Schedule 1 arise in a very specific

context. It relates to where the pricing principles for the designated service take a retail price and subtract avoided costs. It is difficult for the Commission to extract broader principles from such a specific reference, particularly if any pricing principles that may be adopted for mobile termination apply cost-based methodologies.

(ii) *Commission may consider distributive issues where relevant*

Subject to our comments below, Vodafone acknowledges that the Commission is able to take into account distributive issues between consumers and producers, where relevant, in making its recommendation (paragraph 48). However, the Commission may not take into account distributive issues between various producers.

This is in line with our comments above that the considerations in determining whether regulation will promote competition for the long-term benefit of end-users in section 18 are not exhaustive. The Act does not prevent the Commission considering other relevant factors.

However, we have two major concerns with the Commission's discussion in this part of the Issues Paper:

- the Commission must be very careful not to allow wealth transfers between producers as an intentional or unintentional consequence of its recommendation; and
- distributive issues between producers and consumers, if relevant to a particular aspect of the investigation, are not of equal importance to the section 18 considerations (as the Commission argues), but must only be secondary to the primary consideration of promotion of competition and whether that competition creates long-term benefit for end-users.

These concerns are discussed in turn below.

(iii) *The Commission must avoid wealth transfers between producers*

While the Commission may legitimately take account of wealth transfers between producers and consumers in determining whether regulation promotes competition for the long-term benefit of end-users, the Commission must be very careful not to allow wealth transfers between producers as an intentional or unintentional consequence of its recommendation.

In some cases, regulation that promotes competition for the benefit of end-users also results in transfers between firms – the regulation of interconnection and wholesaling are examples of this. In such cases, regulation can be pro-competitive and result in sustainable benefits for end-users. The fact that one firm may earn less after regulation than before is a direct consequence of more effective competition.

However if there is no material increase in the effectiveness of competition, regulation that results in a transfer between firms cannot be said to advance the purpose of the Act.

This issue is particularly important when considering the “pass-through” of any potential reduction in the termination rate. The more intense is competition, the greater the proportion of cost shocks (positive or negative) that will be passed-through to end-users. In other words, the rate of pass-through is a reliable indicator of the intensity of competition. As the Commission has noted, over recent years there has been little if any pass through from lower mobile termination rates into lower fixed-to-mobile prices.

Currently, despite the presence of some smaller fixed operators offering lower fixed-to-mobile call prices to residential consumers, neither Telecom nor TelstraClear have apparently felt the need to reduce their considerably higher retail prices. Indeed they appear to have held these retail prices at a relatively high level without suffering any loss of market share. There is an important question therefore regarding the state of competition in the fixed-to-mobile market – especially for residential end users. It is an issue which the Commission should be considering in considerably more depth than has been indicated in the Issues Paper.

If there is no guarantee of pass through to end users then the only effect of any regulation of mobile termination rates would be to transfer economic surplus from one producer (Vodafone) to another (Telecom), which is not justified under the Act unless it promotes competition for the long-term benefit of end-users.

- (iv) *Commission must not give consideration to transfers between classes of consumers*

It would be an irrelevant consideration to consider transfer of wealth between classes of consumer. The appropriate primary consideration is the extent to which proposed regulation would promote competition and thereby generate long term benefits for end users in aggregate. There is no mandate within the Act that would allow the Commission to treat some consumers as more deserving of benefits than others.

- (v) *Distributive issues (where relevant) are a consideration of secondary weighting*

Vodafone is very concerned with the Commission’s statements that the Commission believes distributive issues, in particular, can be considered to be of equal importance to the section 18 considerations. Vodafone strongly believes that “distributive issues” must not hold the same weight in the Commission’s decision making process as the considerations set out in section 18.

Vodafone strongly disagrees with the Commission’s statement in paragraph 53 that “...[t]he Commission may ... make its own judgement of the appropriate weight to place on distributive issues affecting service providers and end-users respectively.”

The Commission does not have such discretion in relation to the weighting of the considerations.

Again, Vodafone's view is that the section 18 considerations are fundamental. Other considerations, such as distributive issues, are secondary.

(c) *Other points*

Vodafone agrees with the Commission's analysis in paragraphs 54 to 56.

In particular, we support the view in paragraph 55 that "...[e]nd-user is the ultimate user, rather than the intermediate user, of telecommunications services".

Vodafone agrees with the Commission's statement in paragraph 56 that the "end-user" includes potential users of telecommunications services. This is in line with the long-term focus of the Act.

Vodafone agrees with the Commission's statement in paragraph 57 that sustainability is important in interpreting "long-term". If prices are not sustainable, then it is unlikely that they will bring about any real long-term benefit for end-users.

Vodafone believes that the assessment of competition and of the counterfactual should be forward looking over a period that is sufficiently lengthy to reveal and assess the damage to investment in new mobile services and other mobile services that would be done by inappropriate regulation of mobile termination rates. We broadly agree that five years is sufficient for this, although we note that, due to the dynamic nature of the mobiles market, it will be extremely difficult to predict its shape five years hence.

5. Chapter 3 – Decision making framework

Question 3 – Do respondents have any concerns with the Commission's proposed decision making framework?

Vodafone broadly agrees with the Commission's proposed decision making framework, subject to the vital caveat that the primary consideration for the Commission is whether regulation promotes competition in any telecommunications market.

It is very important that the investigation be soundly based in competition law principles. As such, it is imperative that an analysis of the relevant markets, and the degree of competition in those markets, be carried out as a prerequisite to any further investigation and that that analysis be as rigorous as required under a competition law setting and be consistent with the relevant competition law authorities.

Vodafone therefore supports the Commission's statement in paragraph 63 that, where competition is effective, regulation could impose costs without commensurate benefits. Regulation must only be considered where competition is limited and where that regulation will promote competition in the relevant market leading to long-term benefits to end-users.

Vodafone also believes that, as a general matter, the Commission should take care to limit any regulation to the minimum amount that is consistent with resolving a problem. In the case at hand, the competitive problem appears to be in retail markets for fixed-to-mobile calls. This appears to be a structural problem resulting from the presence of a dominant integrated supplier with most of the balance of the market served by one other integrated supplier. The Commission should therefore, as a first step in any recommended intervention, address this narrower but highly persistent competitive problem.

5.1 Stages in decision making process

Generally, Vodafone believes the Commission's list of stages in paragraph 64 requires clarification. We have specific comments on sub-paragraphs 1 and 5.

- (a) In sub-paragraph 1, the Commission is correct that it needs to identify the relevant telecommunications markets. This will involve identification of the relevant upstream market where, it is proposed, regulation will be focussed. This also involves identification of the relevant downstream market in which competition will be promoted by regulation in the upstream market.
- (b) In sub-paragraph 5, the Commission must first assess whether the proposed regulation will promote competition in the relevant downstream market(s). If it does, then the Commission must assess whether that competition will deliver long-term benefits for end-users and in doing so will consider the efficiencies and other factors referred to at the end of sub-paragraph 5. If the proposed regulation will not promote competition in the relevant downstream market for the long-term benefit of end users,

then the Commission must not recommend regulation in the Final Report to the Minister.

- (c) It is conceivable that regulation of only certain participants in a relevant upstream market will promote competition in a relevant downstream market, but regulation of other participants in that upstream market will make no difference to competition in the downstream market. In this case, Vodafone believes the Commission should consider targeting its regulation to those participants where competition will be promoted and refrain from regulation of the other participants.

We believe the Issues Paper has not followed this decision making process. In particular, the stages mentioned in paragraphs (b) and (c) have not been followed properly. The Commission must rectify this when it comes to producing its draft report.

5.2 Detriment to dynamic efficiency

Vodafone notes the Commission's comment in paragraph 65 that assessing the effect of regulation on efficiency is difficult, particularly for dynamic efficiency. However, this is not sufficient cause to disregard dynamic efficiency impacts and the need to take a conservative approach when assessing any trade-offs between dynamic and other efficiencies. While there may be some uncertainty, Vodafone believes that, where any such uncertainty exists, the Commission must err on the side of preserving dynamic efficiency.

This is because any potential detriment to dynamic efficiency is likely to mean a reduction in investment by mobile carriers. A reduction in investment could have serious implications for end-users in terms of the nature and quality of services, and retail pricing.

On balance, such an outcome would be relatively worse for end-users in the long term than if no regulation were adopted.

6. Chapter 4 – Market Issues

Question 4.1(a) – Has the Commission correctly defined the relevant wholesale and retail markets for its Schedule 3 investigation?

The Commission has reached a preliminary view in its Issues Paper that the relevant market in respect of mobile termination be defined as national wholesale markets for the supply of mobile termination services on each mobile network. The Commission has also reached the view that there are two downstream or ‘affected markets’; the retail market for fixed-to-mobile services and the retail market for mobile-to-mobile services.

Vodafone does not believe that the Commission has correctly defined the relevant wholesale market for this investigation. Vodafone believes that there is a national mobiles market including, among other things, termination, subscription and outgoing voice call services. Vodafone has not fully considered the Commission’s views of a fixed-to-mobile market, but has responded in these submissions based on the Commission’s view of the retail market.

Vodafone notes that the Commission’s conclusion is predominately based on and is broadly in line with the approach to market definition adopted by OFCOM and the Competition Commission in the United Kingdom and also that outlined by the Australian Competition and Consumer Commission in its Final Decision in respect of the mobile terminating access service.⁶ Vodafone believes that both these regulators have erred in their analysis of the appropriate market definition. Vodafone also notes that the Commission has not conducted its own analysis at this point in time to determine whether an alternative approach to market definition should be adopted. The OFTEL definition was in any case made in the context of a very different marketplace than New Zealand and a very different statutory framework as we have explained. The ACCC decision appears to have mimicked the OFTEL decision – ignoring the significant differences between the UK and Australian markets and adopting incorrect OFTEL market definitions.

Frontier Economics has been engaged by Vodafone to provide expert economic advice in relation to market definition. A paper by Frontier Economics is attached and forms part of Vodafone’s submission to the Commission.

Vodafone believes that, before the Commission seeks to understand the substitutions that exist to providing termination services, and therefore following the standard process of defining the relevant market, it is important to understand how competition works in the mobiles market. It is also important that the Commission understands and analyses the investment decision process and how mobile telephony products and services are sold to customers (at both a retail and wholesale level) in New Zealand.

Vodafone believes that the mobile termination service is part of a broader market; a national market for mobile services in New Zealand. This market includes:

⁶ The ACCC, however, do not define a separate market for FIXED-TO-MOBILE services. Rather, it is believed that fixed-to-mobile services are part of a broader market including long distance and international calls as well as fixed-to-mobile calls. The main reason for this is that these services are part of the one basket of pre-selected services in Australia.

- termination services (a wholesale service provided between carriers to enable customers to call each other);
- outgoing call services (a retail service provided to customers to make calls to other networks);
- incoming services (a retail service provided to customers to receive incoming calls);
- origination services (a wholesale service provided to other carriers to enable Vodafone customers to originate calls to certain numbers including 0800 numbers); and
- access or subscription services (a retail service to customers to provide them access to a mobile network).

These services are part of a broader market due to the complementarities of supply and demand that exist. The businesses competing in the New Zealand mobiles market do so by offering all mobile services listed above; no individual business only offers termination services or only offers origination services. These services are complimentary in production and therefore a business is only able to compete in the mobile services market if it jointly produces these services.

If, for example, Vodafone decided to provide subscription, outgoing and origination services in New Zealand but not termination services, then Vodafone would find it difficult, if not impossible, to compete in the market as retail customers would not be able to receive incoming calls from customers of other carriers. Clearly, Vodafone would be best placed to compete if it provided all mobile services. Furthermore, the investment that a business is required to make to provide all these services is largely the same. A business is required to acquire spectrum, build and maintain a mobile network, and develop the support systems and processes required to offer customers a suite of mobile services.

In 2001 (and again in 2002), the ACCC determined that mobile termination should not be defined as a separate market. A key reason for this view was the existence of interdependencies between the retail and wholesale elements necessary to provide a mobile call.

“...[T]he Commission notes that the revenue streams flowing from these elements are interdependent. The revenue sources associated with the provision of these joint services are:

- access prices for GSM termination services, from fixed network and mobile network carriers;
- charges for mobile access services from mobile subscribers; and
- charges for outgoing call services from mobile subscribers.

...[If] effective competition exists in the provision of mobile calls, a change in one revenue stream will, in the long-term, be associated with an offsetting change in another stream. For example, if there is an increase in the access price for the GSM termination service, then the value to the mobile carrier of attracting additional mobile subscribers increases. Competition for mobile subscribers will result in a reduction in the price of mobile access services. In addition, the higher access price for the GSM termination service will be passed on to fixed-line end-users in the form of higher prices for call services (i.e. fixed-to-mobile calls). In the long-term the increase in revenue from higher access prices for GSM termination

will be offset by a reduction in revenue from mobile access service fees and charges for outgoing call services.

Where there is not effective competition, there will still be a link between the revenue streams but they are unlikely to be exactly offset.”⁷

The ACCC, in their recent Final Decision on the mobile termination service, still remain of the view that there are “inter-relationships” between the retail and wholesale mobile services.⁸ However, in this decision, the ACCC concluded that these inter-relationships do not necessitate a broader approach to market definition. Further, the ACCC did not agree with the views of many of the parties to the review that mobile termination should be considered as being supplied as part of a broader cluster market containing all mobile services.

The predominant reason for the ACCC to reject the notion of a cluster market analysis (as it applies to mobile termination) appears to be on the basis that the relevant product (mobile termination) is not in the a retail bundle of mobile telephony services and that the various mobile services are sold to different customers. That is, the mobile termination service is sold to wholesale customers (i.e. other carriers) whereas the other mobile services are sold directly to end-users. Vodafone (and Frontier Economics) do not agree with the ACCC’s view regarding the use of the cluster market analysis. The application of cluster market analysis does not require that the products be sold to the same groups or types of customers nor does it require them to be all wholesale products or all retail products.

Please see the Frontier Economics paper for further discussion on why the ACCC was incorrect in its view regarding the use of cluster market analysis.

Question 4.1(b) – Is there any evidence that there is not a distinct market for the termination of mobile calls?

Vodafone believes there is evidence that there is not a distinct market for the termination of mobile calls. The approach by the ACCC and OFCOM to defining the market is dependent on the mobiles market being premised on calling party pays rather than receiving party pays (**RPP**). Under a receiving party pays system, the end user receiving calls on their mobile phone will pay a charge for the termination leg of the call, whereas the origination leg is paid by the originating customer. Therefore, in markets where RPP arrangement exists, the approach taken by these regulators to defining the market does not hold.

The prices for mobile termination are constrained through a variety of substitute services:

- calling a fixed line instead of a mobile number;
- call from a mobile phone;
- SMS as a substitute for voice calls;
- call back; and
- shortened calls when phoning a mobile.

⁷ ACCC, Pricing Methodology for the GSM and CDMA termination service, July 2001, page 26

⁸ ACCC, Mobile Services Review: Mobile Terminating Access Service, June 2004. page 47

Vodafone considers the fixed network operators, particularly Telecom and TelstraClear, do have countervailing power against Vodafone and this does act as an additional constraint on Vodafone. We buy a number of wholesale services from these carriers, many of which are not regulated services under the Act. Examples are national transport, interconnection links and data links. This is probably different to other jurisdictions, where the incumbent fixed network operator is usually subject to far greater and more extensive regulation than in New Zealand.

Indeed, regulating Vodafone's mobile termination rates will reduce Vodafone's countervailing power in our commercial negotiations with these fixed network operators. This will result in higher input costs for the wholesale services that we acquire from Telecom, TelstraClear and others.

We also note the constraints that closed user groups have on mobile operators and the growing usage of new services and products such as the Blackberry, mobile emails and txt messages from mobile devices are often a quicker way of contacting someone than leaving a voicemail message on a mobile phone.

Looking forwards there are increasing incentives on pure-play mobile operators to make mobile telephony more affordable vis a vis fixed line telephony. This pressure will continue to constrain termination prices as they seek to encourage fixed line customers to feel free to call mobile customers.

New operators using wireless local area networks and wireless broadband could create new competition for both inbound and outbound voice call termination on mobile networks.

Question 4.1(c) – Is call transport a relevant upstream market the Commission needs to consider for the purposes of this investigation?

Under present interconnection arrangements with mobile operators, there is a single interconnection charge regardless of where the originating carrier hands over the call. The reason for this is that the originating carrier does not know where the called party is located and, for practicality reasons, the call is handed over generally at the closest point to the point of origination. Therefore, call transport is included as a part of the overall termination service. Vodafone does not believe call transport should be regarded as a separate upstream market for the purposes of the investigation and it would be impractical for this aspect of the service to be separated out from the remainder of the termination service.

Question 4.1(d) – Are there any other mobile markets that respondents consider the Commission should be considering as part of its investigation?

Vodafone does not believe that there are any other markets that the Commission needs to consider as part of its investigation into mobile termination. As a point of principle, Vodafone's view is that the Commission should not extend the scope of the investigation once it has begun and to do so would prejudice the position of Vodafone and other market participants wishing to be heard on the subject of this investigation. If there are grounds for investigating other markets, Vodafone believes that the Commission should do so outside of this investigation.

This comment is particularly relevant in the context of TelstraClear's correspondence with the Commission regarding "mobile origination access services". Vodafone will be responding to TelstraClear's letter of 8 June 2004 as soon as possible.

SMS and data

At this juncture, we note our support for the Commission's comments in paragraph 80 regarding the features of SMS and data call provision in New Zealand. We strongly endorse the Commission's suggestion not to investigate these services, and we set out our reasoning below.

SMS is the first of a growing range of data services that Vodafone provides. Our data services now include MMS/PXT calls and GPRS data sessions for accessing the Vodafone Live! portal, downloading ringtones, viewing websites and so on.

Since the introduction of SMS services, their use has increased significantly, and we continue to see the same levels of growth for SMS going forward. Our other data services are also developing and we are seeing good growth in them as well.

This growth is being driven by technical innovation, the usefulness of the services, the relatively low price of the services, and fierce competition between Vodafone and Telecom with regard to these services.

Vodafone's position is that neither SMS nor data services are fully mature at this point in time. We are continuing to see growth in the relevant markets for these services. We are developing different services, and different features and enhancements for existing services all the time.

The ACCC has recently concluded, in its *Mobile Services Review – Mobile Termination* final report, that "it is unclear whether SMS is fully mature at this point in time. This based on the continued growth being seen in this market."⁹ The ACCC also said:

"The Commission considers that it is unclear at this point in time what direction 2.5G and 3G content applications will take ... In any event, the possible solutions to addressing problems of market power in relation to 2.5G and 3G content to do not appear to include declaration at this point in time."¹⁰

There have been no complaints made to the Commission about interconnection with the Vodafone or any other network for the purpose of terminating SMS and data calls, and we are not aware of any complaints that have been made to the Commission or of any evidence that there is a problem.

Vodafone advocates a cautious approach in respect of the regulation of immature services. Any regulation of SMS and/or data services would be likely to have severe effects on the current growth patterns, and generally on the development of

⁹ ACCC *Mobile Services Review – Mobile Termination*, final report, page 21.

¹⁰ Ibid, page 23.

the market. Further, it would be very difficult to predict the effects of such regulation.

The ACCC did not regulate SMS or data services. Its main reason was that these services are not mature. We endorse this view fully, and contend that the Commission should reach the same view.

As a final point, we believe it is important to recognise the high level of competition for SMS services in the New Zealand market. End-users are benefiting regularly from promotions offered by both Vodafone and Telecom. We are also running promotions for our "PXT" MMS service from time to time. These promotions usually involve either lower pricing or a fixed charge for a large capped amount of SMS or MMS messages.

Question 4.1(e) – When end-users select a mobile calling plan, is there any evidence that they consider the cost to other people of calling them from a fixed line or another mobile phone?

Vodafone believes, if the Commission is considering making a positive recommendation to regulate, that it must (possibly in conjunction with the other carriers) conduct a detailed study to consider this issue further. Currently we consider there is insufficient evidence to make a decision on this question in the New Zealand context.

In Australia, Vodafone, Optus, Hutchison and Telstra engaged a consultant, AMR interactive, to conduct a survey to consider this issue in the context of the ACCC's mobile services review. For the Commission's information, the outputs of this study are attached to this submission. The study involved 500 computer aided telephone interviews and the respondents were asked a variety of questions.

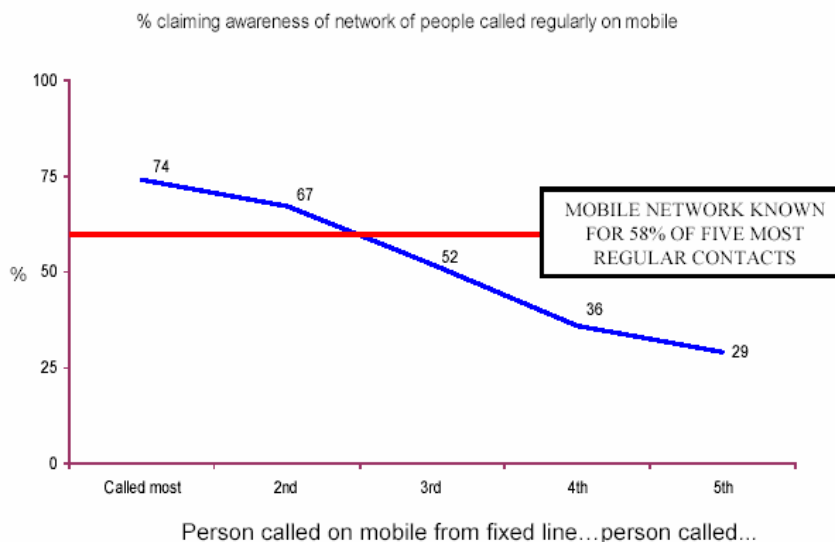
The objective of the consultancy was to determine¹¹:

- the level of awareness consumers have of the mobile phone networks they call from their fixed line;
- the extent to which consumers call a mobile phone when calling people with mobile phones from a fixed line;
- the reasons that users may restrict calls to mobile phones;
- the substitutes used for calling mobile phones; and
- the extent to which people join a network to be part of a closed user group.

In relation to the issue of awareness of the mobile network being called, the survey found that the mobile network being called was known 58 per cent of time for the five most regular contacts of the calling party. This was only in relation to calls originated from a fixed line.

¹¹ AMR interactive, *Fixed-to-mobile research*, June 2003

Awareness of mobile network calling - amongst people called regularly on mobile



The survey also concluded that around 46 per cent of respondents consciously decided to join the same mobile network as at least one person they contact regularly by using mobile to mobile calls. This has largely been driven by differential off net and on net prices that are evident in most mobile markets. Typically, carriers have charged lower prices for calls made to other mobiles connected to their network.

Question 4.2(a) – What evidence is there that mobile termination charges are above cost?

Vodafone believes that, at this time point in time there is no robust evidence in New Zealand to inform whether current prices for the mobile termination service are above the underlying economic cost. Before this issue can be considered, however, it is important to define 'cost'. That is, does 'cost' in this question mean short run marginal cost, average cost or total service long run incremental cost? This must first be determined before this question can be answered.

Irrespective of the definition, Vodafone believes that 'cost' must include an appropriate recovery of fixed and common costs associated with providing the mobile termination service. One must be particularly careful when referring to costs when considering the supply of goods and services that involve substantial fixed and common costs (both capital and operating). This is the case for the provision of mobile telephony services and in particular the mobile termination service. Econometric analysis conducted by PricewaterhouseCoopers for Vodafone in Europe estimated that these fixed and common costs (both network and non-

network costs) vary significantly across networks and represent up to approximately 45 per cent of costs.

Economic theory tells us that pricing services that involve fixed and common costs at their respective marginal costs is not optimal. Doing so may result in businesses making losses (unless these fixed and common costs can be recovered somewhere else) and it may prohibit the providers of capital from earning a fair return on the funds they invest. Therefore services that involve fixed and common costs need to be priced according to Ramsey pricing principles. The prices are marked up from marginal cost based on the inverse of their elasticities. The more inelastic the service, the higher the allocation of fixed and common costs.¹²

Further, prices may not reflect their underlying (private) costs due to external costs or externalities.

Question 4.2(b) – Do charges well above cost indicate that the relevant markets for mobile termination are not competitive?

Vodafone does not consciously price each individual product and service it offers at Ramsey optimal levels. Further, Vodafone does not undertake detailed economic cost modelling for each individual product and service it offers (including mobile termination). Rather, the prices are set by the market and subject to commercial negotiations and competitive pressures. Vodafone also seeks to structure its prices for the suite of products and services it offers, such that it delivers a reasonable return to its shareholders.

Importantly, deviation from Ramsey optimal prices is not necessarily a sign of market failure and therefore does not mean that regulation is necessary. Provided the market is effectively competitive, economists would not normally recommend regulation merely because prices were not set precisely at Ramsey optimal levels. Markets work in rough and ready ways so that at any given point in time a set of “perfect” Ramsey optimal prices may not be observable.

Given this, an analysis and comparison of prices with costs at a particular point in time for a particular service does little to inform the competitiveness (or lack thereof) of the market in which the service is provided. Competition is more about barriers to entry and exit, product differentiation, information available to buyers and sellers, and rivalry between sellers etc.

Further, effectively competitive markets (which the mobiles market in New Zealand is) work in rough and ready ways and prices, at any given point in time and for a particular product and service, may not accurately reflect the underlying economic ‘cost’ of supplying it (including accounting for Ramsey mark ups and externalities). Vodafone therefore believes that it would be more appropriate to compare overall prices with overall costs and the trends of those prices through time to consider this issue appropriately.

Importantly, however, if the Commission decides to regulate the fixed-to-mobile termination service, Ramsey pricing and externality mark ups must be included in the TSLRIC+ analysis of the appropriate mobile termination price. The fact that the

¹² It should be noted that in Europe, debates around Ramsey pricing has focussed on mark ups on LRIC figures. The pure approach to Ramsey pricing would however involve mark ups on marginal costs.

market may not in itself at a point in time determine economically efficient and socially optimal prices does not mean that a regulator, in determining prices for a service, should ignore these important considerations. While these are quite complex matters, it is important that these are included in any analysis of the appropriate mobile termination prices to ensure they are set at levels that maximise economic efficiency and social welfare. Failure to do so would not promote competition for the long-term benefit of end-users.

Question 4.2(c) – Is there any other evidence that competition in this market is limited? For example, is there evidence that the likely access providers are achieving excess returns?

Vodafone is not aware of any evidence that suggests that Vodafone or Telecom as potential access providers are achieving excess returns. The main reason for this is that the businesses that compete in each of these markets are businesses that offer other mobile services including subscription services and outgoing call services (like Vodafone) and businesses that offer products and services in broader telecommunications markets (like Telecom).

Therefore, any analysis of economic profitability will need to apportion revenues, costs, and capital bases to the different products and services that each business provides. This would be extremely complex and arbitrary and is therefore unlikely to provide information that can be relied upon to inform the competitiveness (or otherwise) of the relevant market.

Further, when considering economic profitability, it is important that any analysis is conducted over the life of the investment being considered. This was a major flaw of the ACCC's approach in their Final Decision on the mobile termination service. The ACCC failed to account for the fact that in the early years of investment, the businesses made significant economic losses. This was expected given the significant investments that the businesses made. However, these investments were also made on the basis that there would be at least a return equal to their weighted average cost of capital and therefore on the basis that the annual returns in the later years of the investment would exceed its cost of capital. It is therefore not appropriate to only consider the economic profits (or losses) that a business has reported over the last three or four years.

One commonly used measure to analyse economic profitability is return on capital employed (ROCE). However, ROCE must also be treated with some caution. For example, calculating a ROCE from accounting data will typically overestimate the company's true economic performance because the accounting data typically fails to reflect the long term value of certain types of expenditure like research and development, advertising and marketing expenditure.

Accounting policies and procedures typically require expenditure of this type to be expensed, rather than capitalised and depreciated over the useful life of the investment. This tends to understate the intangible assets of a business and therefore overstate the calculated ROCE of a business. This needs to be taken into account when drawing conclusions regarding whether a business is earning economic profits by using accounting data.

Vodafone does not believe that the Commission should have regard to other accounting measures like “EBITDA” or “EBITDA margins”. Economics says nothing about EBITDA or EBITDA margins. In Australia, the ACCC had regard to analyst reports and company annual reports quoting EBITDA figures and EBITDA margins. Vodafone believes that this is not a theoretically sound approach to analysing economic profitability of a business or a market. We emphasise that because of the need for periodic reinvestment, any analysis of profitability must be conducted over a long time horizon.

The investment cycle in a competitive and technologically advanced industry is usually one involving significant capital investment incurring initial losses, then higher returns as new revenues come on stream, then the need for another substantial new investment of capital. Then a repeat of the cycle.

Question 4.2(d) – How should the cost of mobile termination on NZ mobile networks best be estimated?

Vodafone believes that overseas benchmarking studies can provide some information as to the way termination rates in New Zealand compare with those in other jurisdictions. It is however very important that the contexts from which overseas prices arise be clearly understood so that any differences between the mobile networks and the environments in which they operate compared to New Zealand can be accommodated. For example, termination rates are understood to be much lower in markets in the United States which are premised on receiving party pays – clearly these benchmarks would have less relevance to New Zealand.

However, Vodafone does not believe that overseas benchmarking of termination rates can be used solely to inform the cost of terminating voice calls on mobile networks in New Zealand. We do not believe they are appropriate to calculate with sufficient accuracy the underlying cost of terminating calls in this country. While Vodafone accepts there can be considerable cost and resource required in building and finalising detailed cost models, this is likely to yield a result that is more robust and acceptable to the various stakeholders compared to relying on overseas benchmarks exclusively. Importantly, however, any cost modelling must also be done taking into account Ramsey pricing principles and also accounting for relevant network externalities.

Therefore, Vodafone believes that the best approach to estimating the cost of mobile termination would be to develop a TSLRIC+ model which accounts for the long run incremental costs of providing the mobile termination services and also includes an allocation for the fixed and common costs plus externalities. The allocation of these fixed and common costs should be done using Ramsey pricing principles – this will yield a result that minimises the allocative inefficiencies associated with pricing the service above its marginal cost. While regulators have typically accepted the positive economic efficiency properties of Ramsey pricing, they have generally decided not to pursue Ramsey pricing predominately on the basis of complexity and the lack of robust data on own price and cross price elasticities. Vodafone considers that this position of regulators is not justifiable and that Ramsey pricing principles should be applied where a regulator decides to regulate the service.

It is Vodafone's view that the key problem in determining own price and cross price elasticities is not the lack of availability of a suitable model¹³. Rather, it is the need to populate the model with information from the whole of the market – an essential step in completing the exercise and one that cannot be undertaken by any market participant on its own. We believe that the Commission is uniquely placed to be able to complete such a modelling exercise as it may be able to access the necessary data from all market participants. We also believe that such an exercise would be a fundamental requirement of the cost benefit analysis relating to any proposed intervention.

Finally, any analysis of the cost of mobile termination should also account for the external benefits (externalities) which arise from the mobile services market.

Question 4.2(e) – How relevant are the overseas cost studies?

As mentioned above, Vodafone believes that overseas cost studies can provide some information as to the underlying cost of terminating calls on a mobile network in New Zealand. It is, however, very important that the basis of overseas cost studies be clearly understood and also any differences between the mobile networks and the environments in which they operate compared to New Zealand be carefully analysed. Vodafone does not believe that they can be used solely as a tool to establish costs of mobile termination in New Zealand.

Question 4.2(f) – What is the best way to benchmark them with New Zealand?

We refer to our response to question 7.3(b).

Question 4.2(g) – What evidence is there that New Zealand mobile networks have a higher cost structure than overseas networks?

Vodafone is not aware of any independent economic cost modelling of mobile networks in New Zealand. Vodafone does not conduct detailed economic cost modelling to determine the appropriate price for the mobile termination service. Rather, we establish prices that are commercial and are sustainable in a competitive market.

Having said that, Vodafone believes there may be reasons why the cost of terminating calls in New Zealand are likely to be higher than elsewhere. Vodafone has not conducted an analysis as to why costs may be higher in New Zealand. However, if the Commission or Vodafone were to do so, the following would need to be taken into account:

- size of the mobile market in New Zealand versus other countries;
- size of the carriers in New Zealand versus other countries and therefore the relative level of economies of scale and scope; and,
- population density and geographic and environmental differences which introduce greater costs associated with coverage.

¹³ Vodafone has invested in the development of such a model in Europe and would be willing to work with the Commission to use it in the New Zealand market.

Question 4.2(h) – Is it valid to take half the amount being charged for a mobile-to-mobile call to estimate the portion that recovers the mobile termination charge?

Vodafone does not believe that the Commission should use this approach to inform the underlying cost of providing the mobile termination service. Vodafone considers this to be a very crude and inappropriate approach to considering this matter.

As noted above, mobile carriers who compete in a competitive market may seek to allocate varying proportions of their fixed and common costs to the different services that they provide – outgoing, subscription and incoming. It is possible that carriers operating in this competitive market decide not to allocate fixed and common costs to on net mobile to mobile retail prices.

Therefore, in some instances, on-net retail prices may be set at somewhere near the short run marginal cost of providing the call. The approach of halving on-net prices to calculate a cost of mobile termination may provide some feel for the marginal cost of providing the termination service. However, and as the Commission acknowledges, establishing regulated prices for the mobile termination service based on short run marginal cost is not appropriate as it will lead to businesses making losses. This is also supported by the European Independent Regulators Group, who stated that:

“It was noted that, in principle, regulation may not remove all ability to cross subsidize because cross-subsidy can occur at any MT (mobile voice call termination market) charge above marginal cost. Regulatory price controls usually do not set charges at marginal cost, but instead aim at long run incremental cost plus a mark-up, or average cost.”¹⁴

As noted earlier, mobile carriers may seek to set relatively lower on-net retail prices for outbound calls to grow their customer base and encourage the development of closed user groups. This trend in pricing is what can be expected in an effectively competitive market where carriers are competing for customers.

Further, it should also be noted that the ACCC in its Final Decision did not use this methodology to inform their pricing principle. While the ACCC considered the use of this methodology in their Draft Decision, the ACCC decided that:

“...cost inferences based on mobile-to-mobile pricing as of lesser importance compared with direct estimates of costs”.

Vodafone therefore does not believe it is valid to take half the amount being charged for a mobile-to-mobile call to estimate the portion that recovers the mobile termination charge.

Question 4.2(h) – Is it valid to take half the lowest average mobile-to-mobile calling cost as an estimate of the upper bound of mobile termination cost? [note 2 (h) questions]

¹⁴ Independent Regulators Group, Principles of Implementation and Best practice on the application of remedies in the mobile voice call termination market, 1 April 2004. footnote 35, pg 23

This question is answered in 4.2(g).

Question 4.2(i) – How important is a detailed calculation of the cost of mobile termination in New Zealand when considering the need for regulation?

In assessing the impact of regulation on competition in markets, the Commission will need to form a view on what the regulated price would be. To the extent that this is achieved without a detailed cost calculation, the resulting figure will be subject to considerable uncertainty. In this case, the Commission will be obliged to take careful account of that uncertainty, and in particular to only recommend regulation if it is satisfied that this would, notwithstanding the uncertainty, best give effect to the purpose of the Act.

Vodafone does not believe it is necessary for the Commission to perform a detailed bottom up TSLRIC+ calculation to determine the cost of termination in New Zealand to consider the need for regulation. However if the Commission decides to regulate the mobile termination service, then it will need to perform such a detailed costing analysis. A detailed calculation is extremely costly, complex and time consuming.

Importantly, however, any analysis of costs must take into account Ramsey pricing principles when allocating the fixed and common costs and also relevant externalities.

Question 4.3(a) – How do respondents view the retail fixed-to-mobile market?

The New Zealand fixed-to-mobile retail market is characterised by the presence of an integrated network operator that was formerly the State-owned monopoly provider of all telecommunications services, and several smaller challengers trying to compete against the established provider.

For residential consumers, the fixed-to-mobile retail market is one where retail prices have failed to decline for many years – despite the entry of new players into the market and despite the reduction in mobile termination rates. Mobile termination rates have declined by over 30 per cent during the last five years. Regrettably, fixed network operators have not passed through those cost reductions to consumers. Telecom continues to charge around 71 cents per minute (including GST) for fixed-to-mobile residential calls. Market shares do not appear to have moved to any significant extent – despite the presence of smaller fixed operators offering lower retail prices.

This market is the one in which there appears to be a problem with competition. It is also the one from which most of the end user concerns have arisen.

Question 4.3(b) – What evidence is there that competition in this market is limited?

It is difficult for Vodafone to comment, given our limited knowledge of the fixed market.

Question 4.3(c) – Has preselection had an impact on competition in this market?

Vodafone does not have any data to form a firm view of the impact of preselection. Fixed line operators are likely to be in a better position to comment.

Question 4.3(d) – How would a reduction in mobile termination rates be likely to affect this market?

Vodafone does not believe that the regulation of the mobile termination service will promote competition in the fixed-to-mobile market or any other telecommunications market. To the extent that competition in fixed-to-mobile services has not intensified, it is not because mobile terminating access prices are supposedly set at a level above cost; but because of the existence of an integrated carrier and the structure of the market.

Another way to consider this is to think about what would happen if an integrated carrier did not exist in the New Zealand telecommunications market. The regulation of mobile termination could not promote competition in fixed-to-mobile services. Therefore, if the Commission were to propose regulation of mobile termination service it would be proposing to interfere in one market – the mobiles market which is effectively competitive – to seek to promote competition in a downstream market because the two markets are related by the existence of integrated carriers. To the extent that competition concerns in the fixed-to-mobile market are centred around the integrated carrier and the potential for vertical price squeezes then that is where the focus of any regulatory intervention should be.

Furthermore, promotion of competition says nothing about altering the input costs of a business. Rather the promotion of competition and or the extent to which businesses compete is more in relation to market structure. Market structure is more to do with the following:

- the number, size and structure of active buyers and sellers and potential new entrants;
- degrees of product differentiation;
- the ease with which customers can switch suppliers;
- the amount and the cost of information about price and quality of the products and services; and
- the conditions of entry and exit.

Price squeeze issues

Finally, if the Commission were to regulate the mobile termination service such that in time it more closely reflected its underlying economic cost, Vodafone does not believe it would address any issues associated with vertical price squeeze. It should be noted that Vodafone does not have any evidence to suggest that these price squeezes are occurring. We believe the Commission cannot simply rely on allegations made by Telecom's challengers.

If price squeeze is occurring, it is clearly not occurring in any markets where customers pay from 40 to 70 cents per minute for their fixed-to-mobile calls. We note it is misleading to simply compare a variable per minute interconnection charge with retail prices that may include fixed and variable elements and may involve a number of services other than fixed-to-mobile calls.

However, more importantly, to the extent that they do exist, there is regulatory mechanism in place to deal with the issue. The Commerce Act is a more appropriate regulatory tool to address a competition issue in the fixed market, particularly when a consideration of price squeeze will necessarily involve reviewing not just the level of the wholesale input charge but also the rates charged by the integrated carrier in the relevant retail market.

Notwithstanding this, even if the wholesale regulation did not exist and there was some vertical price squeeze occurring, regulation of mobile terminating rates would not address the issue as Telecom would still be able to internally transfer price the mobile termination services to its own fixed business as low as short run marginal cost.

To avoid doubt, Vodafone is not advocating setting regulated prices for the mobile termination service at Short Run Marginal Cost (SRMC). Given the substantial fixed and common costs associated with providing the mobile termination service, this would lead to substantial economic losses being accrued to a business and therefore under investment. Rather, if regulators are to establish regulated prices for the mobile termination service they must account for all costs including incremental and fixed and common costs and also apply Ramsey pricing principles and mark up for relevant externalities.

This does, however, mean that setting appropriate regulated prices for the mobile termination service that allow the business to earn an adequate return on their investment and maximise consumer welfare will not address any vertical price squeeze issue to the extent that it exists.

We note the issue of vertical price squeeze arises due to the presence of an integrated fixed and mobile carrier in Telecom. As a specialist mobile operator, Vodafone is far less able to exert a price squeeze than Telecom. Regulating a specialist mobile operator's termination rate would not make any difference in the context of vertical price squeeze.

Further information is contained in reports by Vodafone's consultants in relation to this issue generally.

Question 4.3(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?

There has not apparently been any incentive on Telecom or TelstraClear to lower their fixed-to-mobile calling rate in the local residential market, even though the mobile termination rate for these calls has decreased by over 30 per cent in the last five years. We believe that it is reasonable to assume the increasing margins earned by Telecom and TelstraClear in the fixed-to-mobile calling market may have been used to support other parts of their businesses.

We note the comments made by Telstra and AAPT during the course of the ACCC investigation, where these carriers noted that they did not pass through reductions in mobile termination rates to their fixed-to-mobile calling customers.

Question 4.3(f) – Since residential customers can obtain retail rates up to 42 per cent cheaper than the standard 71 cpm rate charge by Telecom and TelstraClear, why don't more residential customers switch to providers offering a substantially cheaper service?

We are considering this issue further and may provide comments to the Commission at a later time. We refer the Commission to the Covec paper on pass through that accompanies this submission.

Question 4.4(a) – How do respondents view the retail mobile-to-mobile market?

The retail mobile services market is one of the most competitive markets in New Zealand. High churn rates, advertising spend to attract customers from competitors, special offers, new capital investments, new innovative products and services, and absence of economic profits by mobile providers are all hallmarks of a competitive market.

Question 4.4(b) – What evidence is there that competition in this market is limited?

Vodafone is not aware of any evidence that competition in the mobile services market is limited. As indicated in our response to question 4.4(a), the evidence points in the opposite direction.

Question 4.4(c) – How would a reduction in mobile termination rates be likely to affect this market?

Vodafone does not believe that regulation of the mobile termination service will promote competition in either the mobiles market or any downstream fixed-to-mobile market. On the contrary, we expect competition in the mobiles market would be diminished by regulation and competition in the market in which fixed-to-mobile calls are provided will remain unchanged. Given that, any further regulation of the mobile termination service will simply result in a value transfer between mobile and fixed players. It would simply strengthen the market position of Telecom. This would work against the Commission's objective of promoting competition.

In the United Kingdom where there was strict separation, OFCOM decided that a 'waterbed effect' would most likely eventuate in the mobile market as a result of reducing the price of the mobile termination service to reflect its underlying cost (plus an allowance for fixed and common costs). If the mobiles market is effectively competitive or at least showing signs of increasing competitive pressures, reducing the prices for a particular service is likely to lead to counterbalancing (and possibly

equal in magnitude) increase in either or both of mobile outgoing call prices and subscription prices.

The mobiles market in New Zealand is different to the United Kingdom for various reasons, but a major difference is that integrated carriers do not exist in the United Kingdom. Vodafone believes that, due to the existence of integrated carriers, it is difficult to determine exactly what may happen to the other prices in the mobile services market. This is not to say that the mobiles market in New Zealand is not effectively competitive, but rather that due to the varying business structures that exist in the market, the impact of any reductions in mobile termination prices will have an unbalanced impact on the various parties.

Irrespective of the impact on prices for other mobile services, Vodafone does not believe that competition will be promoted in the mobiles market. It will be either neutral or it will be negative.

Vodafone expects that the waterbed effect discussed in the United Kingdom will be modified in New Zealand as a result of the integrated status of Telecom. We anticipate that there will be three main effects from regulation. First, Telecom will be granted an unearned advantage in the mobile services market (as shown in the Covec paper). Secondly, Vodafone will seek to recover lost revenues through increases or delayed decreases in other prices. Thirdly, since there is unlikely to be full recovery, Vodafone will need to reconsider the speed and extent to which its investment programme proceeds.

Question 4.4(d) – How would regulation affect the trend towards substitution of fixed line services with mobile services?

As explained above in our answer to question 4.4(c), regulation of mobile termination services would most likely lead to an increase in either or both of mobile outgoing call prices and subscription prices. This will delay, and probably halt, the trend towards fixed to mobile substitution.

7. Chapter 5 – Counterfactual and Factual

This section of the paper discusses issues associated with the design of the cost-benefit analysis of regulation of mobile termination rates. In order to complete this analysis, the Commission needs to define and evaluate the most likely counterfactual scenario (i.e. the world without regulation of mobile termination rates) and the most appropriate range of factual scenarios (i.e. the set of regulatory options under consideration).

7.1 Definition of the counterfactual

The Commission advances three propositions in this section:

- i) that the integrated fixed/mobile firm could unilaterally implement a price squeeze on competing supply of fixed-to-mobile origination;
- ii) that mobile operators have an incentive to maintain high mobile termination rates so they can cross subsidise growth in their customer base; and
- iii) that new technologies, such as VoIP, may constrain fixed-to-mobile call pricing in the future.

Vodafone has addressed price squeeze issues in our answer to question 4.3(d) and in the Frontier Economics paper. We deny the existence of cross-subsidies.¹⁵ We note the implication from (i) that Telecom's position in the fixed-to-mobile markets, as the only integrated supplier, is very different to that of Vodafone. A direct consequence is that MTR regulation has the potential to impact the firms supplying the broader mobile markets in different ways. This point is relevant for the factual analysis.

There is also a fourth counterfactual that the Commission has not identified. As mobile operators seek to drive additional growth, they will compete directly for fixed network call minutes and as a result mobile pricing structures may change.

Question 5.1(a) – What do respondents think is the likely counter-factual?

For reasons described below in response to question 5.1(d), Vodafone expects that, in the absence of regulation of mobile termination rates, these rates will continue to decline. For this to advantage end-users however, it is necessary that at least some retail prices decline. As the competition between fixed and mobile networks intensifies, we expect that new pricing structures will also emerge.

Our analysis of fixed-to-mobile services does not give cause for optimism over the future path of retail prices for fixed-to-mobile calls. The accompanying Covec paper on pass-through rates discusses these issues in more depth and concludes that a combination of one-bill effects and high switching costs relative to benefits has allowed Telecom's dominance of the fixed-to-mobile market to persist in spite of the availability of attractively priced alternatives.

¹⁵ Provided all services earn enough to cover their incremental cost, there is no cross-subsidy. Different mark-ups over incremental cost are to be expected in a workably competitive multi-product environment as firms seek allocatively efficient ways to cover fixed costs using Ramsey pricing principles. Even if prices do not conform exactly to the Ramsey prescription, they tend in that direction.

As mentioned in paragraph 2.2 above, Vodafone believes the counterfactual will need to take into account the effect, or likely effect, that the existing regulatory interventions have on the market for fixed-to-mobile calls. If the Commission needs to consider the *likely* effect of these interventions, then we suggest the Commission assume that these interventions and market developments will be largely successful in promoting competition in the fixed-to-mobile market.

Question 5.1(b) – How do respondents expect relevant telecommunications markets to evolve in New Zealand over the next few years?

The relevant markets are all those that are affected by the regulation of mobile termination rates. As noted above, this is not limited to the termination markets defined by the Commission and the retail markets for fixed-to-mobile calls. Because of Telecom's integrated structure, regulation of mobile termination rates will also affect retail markets for mobile services, within which the differences between providers (notably Telecom's integrated structure) is also relevant.

As noted in response to question 5.1(a), in the absence of MTR regulation, Vodafone expects these rates to decline. We are less optimistic that end-users will substitute in increasing numbers towards the lower cost fixed-to-mobile services already available in the market.

Question 5.1(c) – Are there new technologies likely to compete with mobile termination?

From an end-user's perspective, the ability to contact someone who is moving around is the primary reason for calling a mobile number. Termination on a mobile device is necessary for this to occur. Consequently, while new "termination technologies" may emerge, mobile termination as such will remain a service that is valued by end-users.

Vodafone requests that the Commission also consider reversing this question. Instead of asking what might provide a substitute for mobile communication services, think about the fixed line services for which mobile might provide competition. This is the way Vodafone views its own business, and it is important for the Commission to understand this perspective. One example of the opportunities for mobile to substitute for fixed services is the case of the contestable provision of TSO services to remote subscribers in some areas.

Question 5.1(d) – If there are no new technologies likely to compete with mobile termination, what incentive will there be for mobile network operators to significantly reduce mobile termination charges?

There are a range of substitutes for termination and constraints on Vodafone's ability to set termination rates. These are outlined in response to question 4.1(b).

Question 5.1(e) – What incentive will there be for fixed network operators to significantly reduce retail fixed-to-mobile prices?

Vodafone believes that this is a very important issue for the Commission. Without retail price reductions, end-users will receive no benefit. There is a very significant and persistent gap between fixed-to-mobile retail prices and mobile termination rates, indicating a lack of competitive pressure in the retail markets for fixed-to-mobile service.

7.2 Definition of the Factual

Vodafone has three serious concerns about the Commission's discussion of factual issues. The first is the primary consideration of promotion of competition, the second is about cost estimation and the third is about incentives for retailers of fixed-to-mobile calls.

As mentioned above, the Commission must give primary consideration to whether regulation will promote competition in a telecommunications market and then whether that competition will create a long-term benefit for end-users. The factual must examine these issues extremely carefully. Other impacts and other benefits cannot be considered when constructing the factual. Note that long-term benefits only can be considered; any short-term transitory benefits must be discounted.

According to paragraph 150, the Commission intends to construct a factual in which termination rates are regulated in such a way that they reflect "the estimated cost of providing mobile termination service". The presence of common costs makes this statement ambiguous. It could refer to the stand-alone cost of providing the termination service, which would be the total cost of a mobile business less the incremental cost of services other than termination. It might instead mean the incremental cost of termination. Alternatively, the "cost" could be virtually anywhere between these values depending on the allocation of common costs. Clarity on the cost concept is of critical importance to evaluating the factual scenario.

The use of an incremental cost concept is completely unacceptable to Vodafone and would not be for the long-term benefit of end-users. If all services were priced at incremental cost, it would not be possible for any supplier to earn a return on the capital it has employed. Accordingly, fixed and common costs need to be included in any cost definition. The correct assessment of what share of fixed and common costs to allocate to termination is critical. As a result, some common costs need to be included in any reasonable cost definition. The difficulty lies in knowing what share of common costs to allocate to termination, and therefore (implicitly) what share needs to be raised from other services. Vodafone believes that the only reasonable mechanism the Commission can adopt in this case is Ramsey allocation of costs. This would be the price structure expected from a competitive market.

Turning now to the issue of incentives on retailers of fixed-to-mobile service, Vodafone is concerned with paragraph 154 of the Issues Paper. This paragraph seems to assume that the competition will equalise margins across call types, or at least that there is something desirable about having equal margins. Vodafone rejects this idea. It is normal and efficient for different services to have different

mark-ups over incremental cost. In competition between multiproduct firms, one would expect that the pattern of mark-ups would be broadly consistent with Ramsey prices.

Question 5.2(a) – What do respondents think is the likely factual?

Vodafone believes the likely factual is that lower mobile termination rates will result in a direct increase in the margin of carriers participating in the market for fixed-to-mobile calls. The persistent problems in this market will endure and competition in this market is not likely to increase as a result. Competition in the mobile services market will also not be promoted and in fact is likely to be negatively affected. We believe the Commission needs to take into account this negative effect on the mobile services market in analysing the likely factual.

The factual should also take into account the existing regulatory interventions and market developments referred to in paragraph 2.2 above in our submissions in relation to the market for fixed-to-mobile calls and the impact that these interventions and market developments, as distinct from regulation of mobile termination rates, will have on competition in this market.

Further, for reasons noted above, Vodafone considers that the Issues Paper has not clearly defined the regulatory constraint envisaged by the Commission.

If the Commission were to regulate mobile termination rates to a price between incremental cost and Ramsey prices, Vodafone would expect that mobile operators would need to increase prices somewhere else in their product range. At this stage, the pattern of such consequent changes is not predictable for either carrier. However it does seem very likely that Telecom and Vodafone will react differently, since Telecom's mobile business is integrated with Telecom's fixed line business. This will distort the mobile sector competitive balance and act to the detriment of competition in the mobile market. Even if the pass-through rate into retail prices is 100%, this may provide an absolute or relative advantage to Telecom (see the attached Covec paper on pass-through issues).

If the Commission were to regulate mobile termination rates to approximately Ramsey prices, Vodafone would expect no material change to the pattern of pricing since prices are already broadly consistent with the Ramsey structure.

Question 5.2(b) – If the mobile termination rate was reduced significantly, why wouldn't this decrease be passed through by retailers of fixed-to-mobile calls?

The existing evidence, cited in the Issues Paper, is that over the last seven years posted retail fixed-to-mobile prices have not declined while mobile termination rates have reduced significantly. This is despite the presence of fixed-to-mobile pre-selection. Thus, if the future looks like the past, then first termination rates will continue to decline with or without regulation and more importantly these reductions in mobile termination rates will not be passed through at all. No evidence has been provided that regulated reduction of mobile termination rates will have any impact on this situation.

Even if there is some reduction in fixed-to-mobile call prices, we can be very confident that there will not be complete pass-through, since that would only happen under perfect competition.

The evidence suggests that there is imperfect competition in the retailing of fixed-to-mobile calls, such that material price differences can persist for long periods. Our comments on chapter 4 address the issues arising from imperfect competition for fixed-to-mobile retail service.

Question 5.2(c) – How long is any pass-through likely to take?

For reasons discussed in our response to Chapter 4 and elsewhere, Vodafone does not believe that regulating mobile termination rates will materially stimulate the process of competition in retail fixed-to-mobile markets. We therefore see no reason to expect significant amounts of pass-through into retail prices of a regulated cut in termination rates.

Telecom is the dominant supplier of fixed-to-mobile retail calls and also posts the highest price. Even if pass through occurs, any time lag in that pass through would result in wealth transfers from mobile to fixed players and have a consequential negative impact on the mobile services market. Significant pass-through into retail prices will therefore only occur if Telecom is forced by the competitive fringe to cut its retail prices. It is not apparent how a regulated reduction in termination rates would stimulate this outcome.

Question 5.2(d) – Why haven't recent reductions in mobile termination rates been passed through to retail fixed-to-mobile prices?

Even though alternatives to Telecom's service are available at relatively attractive prices, consumers are not induced to switch. This may be partly because of one-bill effects, which hinder the growth of firms with incomplete service lists. Another contributing factor could be the high cost (in time and effort) of switching between fixed-to-mobile suppliers relative to the expected financial gains.

This is because of the case that the gains from switching between fixed-to-mobile suppliers are lower the more substitutes are available for fixed-to-mobile service. Mobile-originated services (voice or text) are better substitutes, the higher is mobile penetration.

Whatever the reasons, Vodafone submits that the Commission must address the apparent lack of competition in the retail markets for fixed-to-mobile calls. In our view, this requires that the Commission develop a complete understanding of the workings of retail markets for fixed-to-mobile calls before intervening in the termination markets. Given the clear and direct evidence that competition is not working in these markets, throwing money at the problem by cutting mobile termination rates is not likely to be a solution.

We note that the ACCC avoided confronting this issue. Regarding the fixed-to-mobile market, the ACCC cite two ways in which high termination rates reduce competition.

1. It sets the price of an essential input above its cost. This forces fixed-line-only firms to set prices above their cost of supply if they are to recover *their* costs of supplying fixed-to-mobile calls.
2. The vertical price squeeze argument. There are 2 main suppliers of fixed-to-mobile, both integrated. They can foreclose the retail market for fixed-to-mobile and possibly also for the larger pre-selected bundle.

They then argued that continued regulation of termination rates will promote competition by stopping the price squeeze referred to above. Vodafone submits that this is not an option that is open to the Commission. Regulation is not required to deal with any price squeeze; the Commerce Act provides sufficient legislative sanction already. Please see our answer to question 4.3(d) for further discussion of price squeeze issues.

In the UK, it was argued that MTR regulation reduced the risk of anti-competitive behaviour. However Ofcom also had this to say:

“...while it was not claimed that any particular behaviour would necessarily be anti-competitive, it was noted that the greater the gap between wholesale prices and cost, the greater the risk that certain types of behaviour (e.g. discrimination) would have an anti-competitive effect in retail markets.”

This seems to refer to the idea that established mobile operators might set discriminatory termination rates for entrant networks. In Vodafone’s view, this is not a cause for concern in New Zealand, because the Commerce Act will provide an effective remedy, and would in any event need to be weighed against the fact that regulating termination rates will tend to deter investment in new mobile networks.

Question 5.2(e) – Could the Commission require as a term of any mobile termination determination that the reduction in price be passed through to end-users?

Please see our discussion of mechanisms to achieve pass through in our response to question 7.5(b) below.

Pass through is important to avoid a simple distribution by mobile operators to fixed operators, but it does not in and of itself promote competition in any market.

Question 5.2(f) – Are there other actions that could be taken to encourage reductions in mobile termination rates to be passed through to end-users?

As a specialist mobile operator, this is not an area in which Vodafone has direct experience. We have therefore focussed our attention elsewhere in this submission and reserve our position on the possible pass-through options at this stage.

Question 5.2(g) – Would reductions in mobile termination rates lead to an increase in mobile subscription charges?

Vodafone does not earn economic profits. Vodafone is investing hundreds of millions of dollars in a new 3G network with the result that our fixed costs are reaching a cyclical high point relative to variable costs. While it is difficult to predict the precise pattern of future pricing in the event that termination rates are regulated, it is apparent that costs need to be covered in some way.

It is also important to notice that an “increase in mobile subscription charges” in this question needs to be interpreted relative to the counterfactual. So the absence of a price decline that might otherwise have occurred is an increase in that price for the purposes of this question.

Vodafone submits that competition is workably competitive in the wider mobile markets. As a result, a regulated reduction on one revenue stream is likely to be followed by attempts to increase other revenue streams to preserve cost-coverage.

8. Chapter 6 – Competition and Efficiency

Question 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?

A service is the source of a cross-subsidy if it is priced at less than incremental cost. Most businesses do this to some extent. For example, the provision of car-parking and plastic bags by supermarkets at no charge to those customers who use them is, strictly speaking, a cross-subsidy. Vodafone behaves in a similar manner in some cases, such as not charging for voice mail. However, as a general principle, Vodafone's tariffs are intended to recover at least the incremental cost of the relevant service. Some tariff components result in relatively low contributions towards fixed and common costs, but these are not subsidies because all tariff components are designed to at least recover the incremental cost of the associated service.

We also note that it is standard and efficient practice for communication networks to structure tariffs in such a way as to make themselves more attractive to potential customers. This includes, but is not limited to, mobile networks. Another example of the same general strategy is the Trade and Exchange newspaper, which does not charge residential customers to place advertisements in order to generate more advertisements and increase sales of the newspaper. A second example is the structuring of charges within credit card networks, where end-users face no usage charge, but merchants do. The efficiency of these pricing structures derives from the presence of network effects, which are discussed further in response to question 6.6.

Question 6.1(b) – If so, where are the subsidies being directed and what evidence is there of these subsidies?

As noted above, in Vodafone's case, the only items that fall within the definition of cross-subsidies are free services such as voicemail.

Question 6.1(c) – Is particularly high advertising spend an indication of a subsidy?

No. Advertising is primarily intended to differentiate one's product from competing offerings in an industry where products are relatively homogeneous in other respects. Advertising can also have the effect of expanding the overall market size. We are not aware of any reason to expect that heavy advertisers, such as car manufacturers and banks, are cross-subsidising some parts of their business.

Question 6.1(d) – To what extent is Ramsey pricing used in setting mobile calling prices in New Zealand?

It is helpful that this question refers to Ramsey pricing as being a general principle rather than a precise solution. It may be useful to think of a tendency towards Ramsey pricing as being any set of prices that deviate from equal, or equi-proportionate, markups over incremental cost. Prices that satisfy this definition are

used by mobile networks in New Zealand. It is well-recognised as an economically efficient method of allocating fixed and common costs.

Question 6.1(e) – Are mobile operators in New Zealand earning economic profits?

No, Vodafone does not earn economic profits over the life of its capital assets. Across the business, Vodafone made losses during the early years of its entry into the New Zealand market. Given the heavy capital investment by Vodafone its returns in recent years cannot be characterised as “supernormal profits”.

Question 6.1(f) – What is the best measure of the profitability of mobile networks?

First, providing mobile service is a highly capital intensive business. Moreover, many of the relevant assets are not particularly long-lived, at least relative to fixed-line assets. Vodafone invites the Commission to reflect on these questions about profitability in the context of Vodafone’s investment of hundreds of millions of dollars in a new 3G network.

If this capital spend could be avoided, Vodafone would not be undertaking it. The 3G network is being built because of competitive pressure: if we do not build this network, someone else will, and they will then be able to take our customers.

This shows that profitability can only be assessed over a long time horizon. An economic surplus earned, even over several years in a row, is not evidence that the business is profitable over the longer term.

Secondly, because of the presence of fixed and common costs, profitability can only be assessed over the full range of products supplied by the business.

Finally, Vodafone notes with concern that these questions are being asked of a competitive part of the telecommunications industry, while the enduring fixed-access bottleneck is not subject to similar questions.

Question 6.1(g) – What is considered to be a reasonable WACC for a mobile network?

This investigation creates greater revenue risk for a stand-alone mobile operator, than for an integrated carrier. This is because a stand-alone mobile operator will unambiguously lose revenue from reduction in mobile termination rates, whereas an integrated carrier’s losses may be partially offset by gains that it makes in the margin on fixed-to-mobile origination, depending on the rate of pass-through. This risk is not diversifiable and therefore should enter a WACC calculation. It follows that, for the purposes of this investigation, a WACC suitable for a mobile only network should be used.

Question 6.2 – What efficiencies and inefficiencies do respondents consider would result from the regulation of mobile termination?

Vodafone does not expect any significant allocative efficiency gains in the markets for fixed-to-mobile service, because we believe that pass-through rates will be very low. We expect that there will be a rent transfer from terminators of fixed-to-mobile calls to originators and integrated suppliers. In Vodafone's opinion, the Commission's definition of allocative efficiency (paragraph 167) does not focus on the key determinants of allocative efficiency, which are the pricing of services and the potential for increasing the gains from trade in the relevant markets (i.e. the reduction of deadweight loss).

We do not anticipate any material changes to productive efficiency. It is important to note that reducing the input cost of termination is not a productive efficiency gain even though it shifts down the average cost curve for fixed-to-mobile originators. This is because there is no change to the amount or value of real resources used in the production of fixed-to-mobile calls.

The largest effect is likely to be on dynamic efficiency, and Vodafone believes this will most likely be negative in aggregate. Regulating termination rates will not eliminate or reduce any barrier to entry, as is the case for all other services listed in Schedule 1 of the Act. In fact, it is more likely to *discourage* entry into the mobile sector. We therefore do not envisage that the competitive process will be materially enhanced, so there will be no dynamic efficiency gain. On the other hand, regulating termination rates will impose a significant constraint on the pricing flexibility available to the mobile sector, which is arguably the most rapidly evolving sector of the industry. This has significant potential to alter investment activity of various types, including investment in the ongoing fight for market share.

Question 6.3 – What technical and practical considerations do respondents think the Commission needs to consider?

The most important issue the Commission needs to consider is how the reduction of this particular wholesale price (the termination rate) will promote competition in some other market(s), with the result that end-users are better off in the long-run. Vodafone does not believe that the proposed regulation will increase competition. We also believe that end-users will not be materially better off, and that to the extent they are, this will be a direct effect of regulating prices rather than anything attributable to competition. Moreover, we believe that competition in mobile markets will be harmed as a result of a tilting of the environment in favour of Telecom.

The second most important issue for the Commission is to assess how other prices will adjust in response to the regulation of termination rates, and what effect this will have on end-users. Vodafone invites the Commission to look backwards when making this assessment. Suppose termination rates were regulated five years ago and that as a result there were far fewer people receiving mobile service now; would this have been good or bad for end-users? In our view, to the extent that the prevailing tariff structures promote the uptake of mobile service, end-users are better off in aggregate.

Question 6.4(a) – How do respondents think that existing regulatory decisions are likely to impact on market evolution and the need for mobile regulation?

As discussed above in paragraph 2.2 of our submissions, the existing regulatory interventions and market developments will effectively eliminate the barriers to entry into the fixed-to-mobile retail markets. One would therefore expect to observe steady growth within the competitive fringe in these markets.

This will only force a competitive reaction from Telecom once the fringe captures a sufficiently large market share. At that point, it will be economically desirable for Telecom to switch its primary focus towards customer retention, for which price cuts are the main competitive weapon. There are sound reasons to expect that Telecom of retail fixed-to-mobile services will resist price cuts for as long as possible. However, provided the competitive fringe is increasing its market share, Telecom will eventually be forced to pass on some of the additional surplus it has been earning as a result of lower termination rates.

We therefore encourage the Commission to investigate the evolution of retail shares in the fixed-to-mobile sector in order to inform its view as to the likely timing of Telecom's retail price cuts for fixed-to-mobile service.

Question 6.4(b) – Do respondents have views at this stage on whether any mobile termination regulation should be temporary or permanent?

Yes. In our view there should be no termination regulation. If the Commission rejects this view, then regulation should be temporary. We also note that the Act places time limits on the life of designations and that it is therefore beyond the Commission's legal ability to impose permanent regulation.

In a fast changing sector such as ITC, regulatory forbearance is the optimal approach. The risks of unintended consequences of regulatory intervention are too high to intervene without considerable caution. Sunset clauses for regulatory intervention should be the standard. In the ITC area it is too difficult to predict the future. Consequently it makes little if any sense to promote "permanent" regulation.

Question 6.5(a) – What are respondent's views on the need for a full cost benefit analysis?

Vodafone is strongly of the view that a full cost-benefit analysis is necessary. Regulation of any mobile sector activity would be a very significant extension of the scope of economic regulation, not just within the telecommunications sector but within New Zealand more generally. In particular, it would be the first time that regulation was imposed in a sector served by more than one firm.

Further, we believe that even to the extent that competition in a telecommunications market would be promoted by regulation (which we doubt and reject), the long-term benefits of doing so are likely to be minimal. This can be contrasted with what we expect to be the considerable costs of regulatory intervention, particularly in terms of the adverse impact on competition in the mobile retail markets.

Question 6.5(b) – What are the direct costs and the opportunity costs of regulating mobile termination?

Vodafone has not estimated the level of these costs. The direct costs are those associated with determining the regulated price and implementing the regulation. It is important when calculating these costs to include the cost of resolving the pass-through issue which is of critical importance to end-users.

There are two general categories of opportunity cost. The first arises from the way regulation will affect the commercial pressures facing the mobile operators, as discussed above in relation to question 6.2.

A second category of opportunity cost is the cost of diverting the Commission's attention from other matters that have the potential to promote competition for the long-term benefit of end-users. For example, the Commission could instead be promoting reform of the TSO provisions of the Act, and working on the difficult but important problem of TSO contestability.

Question 6.6(a) – Has the Commission identified the right categories of costs and benefits?

Most of the relevant costs are mentioned in the Issues Paper. From the perspective of fixed-to-mobile markets, the only missing item is the opportunity cost of the Commission's time (discussed above).

There are some serious problems with incorrect classification and insufficient qualification of benefits in the Issues Paper.

We do not see how regulating termination rates will strengthen competition in "the mobile telephony market". As noted above, it is widely accepted that setting relatively high mark-ups on the termination service has been a significant contributor to the growth in mobile penetration and the consequent end-user benefits. Given that history, the presumption should be that cutting termination rates will reduce competition in the mobile sector rather than enhance it. This item should therefore be classified as a cost rather than a benefit.

Similarly, it is difficult to see how constraining the earnings of mobile networks will promote "entry and the roll out of new mobile services". In our view, the reverse presumption is appropriate, so this item should be also be classified as a cost rather than a benefit.

The third item refers to the impact of regulation on competition in the retail markets for fixed-to-mobile service. For reasons discussed in the accompanying paper by Frontier Economics and elsewhere in these submissions, Vodafone does not believe that regulating termination rates will enhance competition in the fixed-to-mobile retail market.

The fourth item refers to the benefit end-users might achieve from lower fixed-to-mobile prices, but fails to recognise the significant hurdles the Commission faces in contriving such an outcome, or the fact that these hurdles are largely independent of the level of termination rates.

Finally, we object to the proposition that cutting termination rates will increase the pressure on mobile carriers to improve efficiency. As well as being an irrelevant consideration in the context of this investigation and an unwarranted slight on our business acumen, it also displays a lack of understanding of incentives. If one assumes that firms seek to maximise shareholder returns, then the strength of incentives for cost reduction does not derive from presence or absence of constraints on earnings, but from the way such constraints are framed. For example, rate of return regulation undermines cost reduction incentives, not because it constrains earnings (which are also constrained by price caps) but because it reimburses costs.

Question 6.6(b) – What other costs and benefits should the Commission consider in a quantitative analysis of mobile termination regulation?

The impact on competition between Telecom and Vodafone is important. As an integrated firm, the proposed regulation can advantage Telecom relative to Vodafone even if the rate of pass-through is 100%, and Telecom is better off the lower is the rate of pass-through. Telecom therefore has an incentive to resist pass-through because this will harm its main rival in the mobile sector.

This incentive would be less of an issue were it not also for the fact that Telecom is the dominant supplier of fixed-to-mobile services. This gives Telecom the ability to resist pass-through.

The implications of these facts need to be carefully weighed. To the extent that Telecom is able to resist pass-through, regulation will result in a transfer of funds from Vodafone to Telecom. There are many alternative uses of these funds, but an obvious possibility is that Telecom will use them to alter the competitive balance in the mobile sector. In any event, there is no reason to expect that end-users will benefit from an inter-firm transfer of this type, which would certainly distort mobile competition from its current course.

Question 6.6(c) – How should network externalities be handled?

Network externalities are a good reason to structure mobile tariffs in the way that is commonly observed, with proportionately higher mark-ups on termination than on origination. The reason is that mobile networks are more highly valued the more people subscribe, yet each person only takes account of their own welfare when deciding whether to subscribe. Given this, equi-proportionate mark-ups will induce too few people to subscribe when viewed from a social standpoint.

In principle, therefore, the relative valuations users attach to their own subscription and calling behaviour and that of their contacts could be used to estimate the socially efficient balance between mobile origination and termination rates.

In practice, this would be extremely costly, with an uncertain benefit. Vodafone would therefore oppose the Commission undertaking this work unless the alternative involved regulation of termination rates to values consistent with equi-proportionate mark-ups.

9. Chapter 7 – Service Specification

9.1 Description of service

The specific questions posed by the Commission in Chapter 7 presume that the mobile termination service will become a regulated service.

Vodafone does not believe that the Commission would be justified in making any recommendation in support of the regulation of mobile termination rates as such regulation would not promote competition in any telecommunications markets.

Accordingly, Vodafone's responses to the Commission's questions in Chapter 7 are without prejudice to Vodafone's view that regulation would not be justified.

Question 7.1(a) – How should the mobile termination service be described?

Vodafone will consider further how the mobile termination service should be described in the event that it is proposed to be become regulated and provide comments to the Commission at a later time.

Mobile-to-mobile termination services should not be included

However, Vodafone strongly believes that any description of the mobile termination service should not include the termination of voice calls that are originated by mobile subscribers (**mobile-to-mobile termination services**).

Vodafone believes that mobile-to-mobile termination services should be excluded because the largely symmetrical call traffic between New Zealand mobile network operators means there is no incentive to raise termination charges above the underlying cost of production.

Where call traffic between mobile networks is approximately symmetric, there is no net benefit in increasing termination charges as any increase above the underlying cost of production is likely to be matched by other mobile network operators.

In determining whether or not to include mobile-to-mobile termination services in the description of the mobile termination access service, the ACCC acknowledged that termination charges paid by mobile network operators might cancel each other out.¹⁶

However, information made available to the ACCC indicated that call traffic between all mobile network operators was not always symmetric. The ACCC referred to Virgin Mobile's submissions that its customers are net recipients of voice calls.¹⁷

The ACCC believed that the presence of asymmetric traffic flows between mobile networks indicated that there may still be an incentive for some mobile network

¹⁶ ACCC *Mobile Services Review – Mobile Termination*, final report, page 26.

¹⁷ *Ibid*, page 27.

operators to raise their termination charges above their underlying cost of production.¹⁸

The situation in New Zealand is quite different.

There are currently only two mobile network operators in New Zealand and call traffic is largely symmetrical between the two networks. Therefore, there is no incentive for either operator to raise termination charges above the underlying cost of production, as such increase is likely to be matched by the other operator. In this context, competition would not be promoted by regulation of mobile-to-mobile termination services.

To the extent that traffic is not symmetrical between the two networks, such imbalance is likely to be minor or transitory and, therefore, any benefits of regulation are also likely to be minor.

Further, the entry of an additional mobile network operator would not necessarily generate asymmetric traffic flows. In a paper published in the first Vodafone Public Policy Series, Professor Patrick Rey and Dr. Bruno Jullien comment that there is no automatic link between network size and traffic balance and a small operator can “target” subscribers who tend to receive more calls than they make.¹⁹ If the distribution of customer types is similar across networks however, then traffic flows in each direction will be similar regardless of the number of customers on each network.

The authors also refer to a growing body of literature which suggests that where competing mobile network operators set termination charges through bilateral agreements, the operators have no incentive to increase termination charges.²⁰

Question 7.1(b) – Should the description apply to voice calls terminated on any cellular mobile network regardless of what generation technology it is?

3G regulation would be premature

Vodafone is strongly of the opinion that any regulation of 3G voice call termination services would be extremely premature at this point.

Vodafone considers that the ACCC’s decision to regulate 3G voice services was unnecessarily heavy-handed and premature in this regard.

Unlike Australia, where Hutchison has launched a 3G network that provides coverage in Melbourne, Sydney, Perth, Adelaide, Brisbane and the Gold Coast, no mobile network operator in New Zealand has yet built a 3G network. Essentially, at this time, there is no service or technology to regulate.

Vodafone endorses the approach of Ofcom, which recently decided that regulation of 3G voice call termination services was not required for the following reasons:

“5.30 At such an early stage of roll-out, the costs of 3G voice call termination are unclear, and robust cost information is difficult to ascertain. Thus, in terms of the

¹⁸ Ibid.

¹⁹ *Mobile to mobile call termination*, page 21.

²⁰ Ibid, page 19.

charges set for 3G voice call termination, there is currently insufficient evidence to conclude that such charges are excessive.

5.31 Ofcom also considers that any adverse effects to consumers associated with charges for 3G voice call termination are likely to be small, given the very limited size of '3's mobile subscriber base relative to the wider mobile sector. In Ofcom's view, the lack of evidence of excessive charging, combined with the modest effect any charges have on consumers as a whole, mean that it would be disproportionate to impose ex ante obligations on 3G voice call termination at this time...".

The points relied on by Ofcom in reaching its decision are discussed in more detail below.

Similarity of service alone not sufficient to justify regulation

Vodafone accepts that 3G cellular networks will offer similar voice functionality to 2G networks. However, this point alone is not sufficient to justify regulation of 3G voice call termination services. Vodafone believes that the ACCC, in reaching its decision to regulate 3G voice call termination services, placed too much emphasis on the fact that voice services on 3G networks were not argued to be any different to voice services on 2G networks.

In particular, the ACCC did not place enough importance on the fact that the cost of terminating a voice call on a 3G network is not known, a factor emphasised by Ofcom in reaching its decision that regulation of 3G voice call termination services was not required. Nor did the ACCC place sufficient emphasis on the fact that 3G networks will not develop unless carriers can expect to recoup their costs, and the adverse impact of regulation on the business cases for such investments.

No opportunity for market to perform

Regulation of 3G services before a 3G network is built removes any opportunity for the market to perform.

This is contrary to the statement of the Minister of Communications in December 2000 that regulation will only be used as a backstop if commercial solutions cannot be found.

Upon the passing of the Telecommunications Act in December 2001, the Minister again emphasised that the Act supports "as much market as possible, and as much government as necessary".

The primacy accorded to commercial negotiations is reflected in section 22(c) of the Act which requires a person to make reasonable attempts to negotiate the terms of supply of a service before applying for a determination.

Against this background, the regulation of 3G services before any commercial solutions can even be considered would be an extremely heavy-handed step.

Minimal, if any, benefit to end-users

As 3G networks are yet to be deployed and terminating traffic volumes are likely to be negligible in the short-to-medium term, any adverse effects to end-users

associated with charges for 3G voice call termination services are likely to be minimal.

As outlined above, Ofcom based its decision that regulation of 3G voice call termination services was not required in part on the very limited size of 3's mobile subscriber base relative to the wider mobile sector, with the result that any adverse effects to consumers associated with charges for 3G voice call termination were likely to be small.

Impact on investment 'at the margin'

From a business perspective, the potential regulation of 3G networks is a critical issue for Vodafone. As outlined in greater detail under question 7.2(a) below, Vodafone has committed to plans to invest in designing and building a 3G network in New Zealand. It is intended that Vodafone will be able to offer 3G enabled products and services to customers in the main centres in the first half of 2005.

While the threat of regulation of 3G voice call termination services will not change Vodafone's decision to deploy a 3G network, it will negatively impact Vodafone's investment 'at the margin', by impacting the pace and altering the scope of Vodafone's roll-out.

Question 7.1(c) – Would the costs of call termination on a 3G network be likely to be similar to those of a 2G network? If not, why not?

Neither the charges nor the economic costs of terminating voice calls on a 3G network are known at this point. In relation to the economic costs of 3G voice call termination, this is the case both nationally and internationally.

However, there are good reasons to expect that termination costs overall will increase as a 3G network is rolled out, although they may subsequently decline. To understand this, it is important to note that the 3G network will co-exist with the 2G network for some time. As a result, fixed costs will be substantially increased when viewed across the whole business of a carrier during the process of deployment and the migration of customers. Even if traffic increases as 3G services become available, the allocation of fixed costs per unit of traffic will increase. It may be the case that unit costs (given similar traffic volumes) turn out to be lower on 3G networks than on 2G networks. If so, unit costs will decline (relative to the situation today) once customers have migrated to the 3G network and the 2G network is decommissioned.

Although the ACCC regulated both 2G and 3G voice call termination services, the ACCC acknowledged that it had not used any 3G cost data or modelling in constructing its 'target price' or target price range for the mobile termination service²¹.

Vodafone is not aware of any cost-based model that has been built by any regulator for 3G voice call termination services. However, even if such an economic model has been built, its applicability to the New Zealand context would need to be considered.

²¹ Vodafone Australia, *Response to ACCC Draft Decision*, 30 April 2004, page 12

As mentioned above, in reaching its decision that regulation of 3G voice call termination services was not required, Ofcom emphasised that at such an early stage of roll-out, the costs of 3G voice call termination are unclear and robust cost information is difficult to obtain. Therefore, there is insufficient evidence to conclude that termination charges are excessive. Vodafone believes this point was under-emphasised by the ACCC in its recent decision to regulate 3G voice call termination services.

9.2 One-off or staged price reduction

Question 7.2(a) – What evidence is there that a one-off reduction in mobile termination rates is less desirable than a phased reduction over several years

As a general matter, investment is much less likely to be deferred under a staged reduction than a one-off cut in termination rates. Investment planning is often very sensitive to the timing of revenues, and is particularly so when there are significant technological and market uncertainties as is the case with 3G. The timing of much of Vodafone's planned investments (which are outlined further below) is flexible, and is far less likely to proceed as quickly, or to be as extensive, under a one-off cut than a staged reduction in termination rates.

No notice of potential reductions

Vodafone has not had any notice that it should plan for a regulated adjustment to mobile termination rates. On the contrary, this issue was considered carefully in the Ministerial Inquiry in 2000, and the Government decided not to regulate mobile termination rates. This is unlike the situation in Australia where mobile termination has been a declared service since 1997 and pricing principles have applied since 2001, the Commission has only recently notified the industry of its intention to investigate mobile termination rates. In this context, a one-off reduction in mobile termination rates would be particularly severe and potentially without precedent.

One-off reduction would increase distortion in mobile-mobile competition

As is noted elsewhere in this submission and shown in the Covec paper on pass-through, the impact of a regulated reduction in mobile termination rates will advantage Telecom relative to Vodafone, even if there is full pass-through to end-users. This is a significant distortion of competition in the mobile sector. While the results of such a change are difficult to predict accurately, it is clear that the business environment will tilt in Telecom's favour, and that Vodafone would therefore need to find ways of countering the advantage Telecom would receive. The more gradual the change in termination rates, the more likely it is that Vodafone can react to this shock in a way that limits that adverse competitive effect.

Significant impact on Vodafone's business strategies

A one-off reduction of mobile termination rates would have a significant disruptive impact on investment.

Vodafone is currently committed to at least two major projects:

- the design and build of 3G network infrastructure; and
- [RI]

There is also the impending requirement to implement long-term number portability, which will be a major project for the company.

Vodafone has an ongoing commitment to rollout new products and services as technology evolves. This includes the rollout of a 3G network in which Vodafone is investing [RI]

[RI

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[RI

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Vodafone has committed to substantial capital and operational expenditure to undertake these projects. The business cases for these major projects did not anticipate regulation of mobile termination rates.

A one-off reduction in mobile termination rates might require Vodafone to immediately reduce operating costs until other streams of revenue can be developed.

International practice

Concerns about the impact of revenue shock arising from one-off reductions in mobile termination rates have caused regulators to adopt phased reductions.

The Commission is not correct in suggesting in paragraph 212 that, after initially favouring a phased reduction, Ofcom decided on a one-off reduction in mobile termination rates in its final decision.

In fact, phased reductions based on RPI-X have been in place in the United Kingdom for a number of years. In the case of the recent Ofcom conclusion, the Commission's statement in paragraph 212 has been taken out of context. In fact, Ofcom did not decide on a one-off reduction. Ofcom proposed a two-stage reduction with a target date of March 2006. Ofcom defined two control periods:

- 1 September 2004 to 31 March 2005; and
- 1 April 2005 to 31 March 2006.

Due to differences in the calculation of the rates for the period leading up to Ofcom's market review, and a delay in the beginning of the implementation period, a continuation of the previous glide path balance would have in fact resulted in

Ofcom setting a charge for the first period below the efficient charge level²². Ofcom stated that “setting such a target charge would be unreasonable and have undesirable consequences”²³. For this reason, Ofcom had no choice but to implement the charge control at the efficient charge level for 2004/2005, so that the target average charge in the first period would be set at the efficient charge level for 2005/2006.

Accordingly we note that the Commission’s statement in paragraph 212 is inaccurate in the sense that Ofcom did actually decide on staged reductions by means of two control periods. It was only because of peculiar circumstances in the way the price was set that Ofcom, in this case, decided to go straight to the efficient charge level.

Further, despite differences in the Australian context where mobile termination has been a declared service since 1997 and pricing principles have applied since 2001, the ACCC proposed a phased reduction of mobile termination rates in its final report. The ACCC decided that it is appropriate that the price related terms and conditions of the pricing principle determination for the mobile termination declared service should specify an adjustment that ensures the price of the services gradually reduces to the target price.

The main reason the ACCC adopted a glide path was because a sudden decrease in mobile termination rates could cause substantial adjustment costs for the mobile network operators. In particular, a move to substantially reduce the price of termination services could generate significant disruption to the pricing and business strategies of mobile network operators. This, in turn, would impinge on the legitimate business interests of access providers who have based their business plans around existing pricing structures.

It was also suggested by Optus in submissions during the Mobile Services Review in Australia that a one-off reduction may result in increased mobile retail prices to offset reductions in revenue from mobile termination. As such, a gradual adjustment would cushion consumers against the shock of less desirable mobile price structures.

The International Regulators Group (**IRG**) also supported phased reductions over one-off reductions in a report it released earlier this year²⁴. The IRG believes that obligations imposed on mobile network operators should be proportionate, and can range from transparency through to charge controls and non-discrimination obligations. However, in the case of charge controls, the IRG states that:

An immediate implementation of charge control that sets charges at the competitive level could cause disproportionate problems for mobile operators. In such cases NRAs may apply a price cap system or a glide path to achieve a competitive level over a reasonable period of years. The reasonable period is aimed at providing a transition towards a competitive level.²⁵

The IRG therefore take a view based on the principle of proportionality. They say it would result in disproportionate problems for the mobile network operators if a one-

²² Ofcom, *Wholesale Mobile Voice Call Termination – Statement*, 1 June 2004, paragraph 6.80

²³ *Ibid*, paragraph 6.80

²⁴ Independent Regulators Group, *Principles of Implementation and Best practice on the application of remedies in the mobile voice call termination market*, 1 April 2004.

²⁵ *Ibid*, page 27.

off reduction were implemented, and that a more proportionate remedy is to phase in the reductions over a reasonable period of years.

The importance of proportionality in addressing an appropriate regulatory remedy is also recognised by Ofcom:

In the Director's view, a charge control if appropriately designed is a proportionate response where competitive pressures and other regulation is not otherwise sufficient to ensure that prices are cost reflective.²⁶

Local practice

An immediate reduction in termination rates would also set a new precedent within New Zealand. The Commission has recently designed a new regulatory regime for the electricity lines sector, during which it was required to choose between gliding prices downwards and making an initial adjustment, known as a P_0 adjustment. Unlike mobile telephony, electricity lines businesses are natural monopolies. The Commission declined to make a P_0 adjustment in this sector. It would therefore be a significant change in stance if the Commission were to mandate such an adjustment in the case of mobile termination rates.

Benefit relies on pass-through

Further, the Commission suggests that the quicker mobile termination rates are lowered, the sooner the benefits to end-users will start to materialise.

As outlined above, mobile termination rates have been decreasing in New Zealand over many years in the absence of regulation, and are continuing to decrease. During the same period, fixed-to-mobile charges have not mirrored this trend.

Irrespective of whether there are regulated reductions in mobile termination rates, benefits to end-users will not start to materialise until fixed network operators start to pass-through those reductions to end-users.

Question 7.2(b) – Could a staged rate reduction be managed given the current wording of the Act?

We believe that the current wording of the Act can accommodate a staged rate reduction.

The framework in the Act is sufficiently flexible to allow staged reductions. There is nothing in the Act which expressly prevents using a formula for a pricing principle, so long as the formula is in accordance with section 18 (which the Commission must consider when it makes a determination), and the input information is clearly specified.

We briefly discuss the applicable legal aspects below, and then describe what we consider would be the best approach to implementing a staged price reduction in accordance with the Act.

²⁶ Ofcom, *Wholesale Mobile Voice Call Termination - Proposals for the identification and analysis of markets, determination of market power and setting of SMP conditions - Explanatory Statement and Notification*, 19 December 2003.

Applicable legal framework

Section 20(1) provides that an access seeker may apply to the Commission for a determination of all or some of the terms on which a designated access service must be supplied. Section 29(c)(i) and (ii) state that a determination for a designated access service must be made in accordance with:

- the applicable initial pricing principle; and
- any regulations that specify how the applicable initial pricing principle must be applied.

Implementation

We believe that the Commission could achieve staged price reductions within the current wording of the Act by:

- adopting a formula which can be used as the initial (and/or the final) pricing principle for the new designated access service; and
- additionally, if necessary, providing for regulations that specify how the applicable initial pricing principle must be applied (pursuant to section 29(c)(ii)).

The Act can accommodate a formula being used as a pricing principle.

Formulas are already used in the Act. For example, the designated access service “Residential local access and calling service offered by means of Telecom’s fixed telecommunications network” uses formulas for both the initial and final pricing principles (Telecom’s standard retail prices minus 2%). So does the designated service “Retail services offered by means of Telecom’s fixed telecommunications network as part of a bundle of retail services”. We do not believe a formula for a staged price reduction would need to be any different in terms of its form of expression.

A simple example can illustrate how the use of a formula can achieve a staged rate reduction. Take the designated service “Retail services offered by means of Telecom’s fixed telecommunications network as part of a bundle of retail services” again. If the formula in the initial pricing principle was applied today, it would result in a wholesale price for a service, or a bundle of services. If we applied the formula again in six months, the outcome could well be different because the imputed retail prices, used as an input, may well have changed over time. Simply including a variable which changes with time can achieve a variable output from the formula, sufficient to achieve a staged rate reduction.

Pricing principles

Each designated service in Schedule 1 has an “Initial pricing principle” and a “Final pricing principle”. These principles must be used by the Commission to derive the appropriate price for the service.

We suggest that any staged price reduction should be implemented as a formula in the initial pricing principle.

Regulations for applying the initial pricing principle

The Act also provides a mechanism which can be used by the Commission in the application of the specific pricing principles.

Regulations could be drafted on such matters as how the Commission must use the formula to calculate price at given points in time throughout the control period, how the variables are to be collected and then inputted into the calculations, where the source data for the variables must source from, minimum quality and reliability standards for source data, and so on.

Section 29(c)(ii) is flexible enough to allow any regulation which will specify how the initial pricing principle must be applied. We believe this gives the Commission sufficient ability to implement a staged price reduction without any uncertainty.

Potential argument that Commission can only include one price in its determination

There is a potential argument that the Act only allows the Commission to set out a single price in its determination for a designated access service. We are not convinced by this argument. However, even this argument was successful, using a formula satisfies this requirement anyway.

Under section 20(2), the terms set out in the determination on which the service must be supplied may include “the price payable” for designated services. Here the word “price” is expressed in the singular. Another reference in clause 5(c) of Schedule 1 also uses the word “price” in the singular (in the context of the standard access principles).

On this basis, it is arguable that the Act only allows the Commission to include a single price in a determination. This may mean that a staged price reduction, where there may be a number of prices at different times, could not be written into a determination.

However, this argument is not likely to succeed because the schematic links in the Act between the word “price” referred to above and the actual pricing principles themselves is too tenuous to establish that only a single price can be included in a determination.

In any case, this argument would not prevent the Commission from setting out a formula which would determine prices. We say this because, even though the formula may produce a different result each time, there is only ever one price at any given point in time.

This is in accordance with the Act. As a further example, refer again to the existing designated services “Residential local access and calling service offered by means of Telecom’s fixed telecommunications network” and “Retail services offered by means of Telecom’s fixed telecommunications network as part of a bundle of retail services”. The first of these services uses a formula to set a retail-minus discount. There are two variables in the initial pricing principle – Telecom’s standard retail

prices, and a fixed variable of 2%. If, for example, Telecom's retail prices changed and became lower over a period of time, then the result of this formula would also be different each time (if the formula was applied at regular intervals over that period).

Question 7.2(c) – If a reduction in mobile termination rates is to be phased in over time, over what period should it be phased in?

If the mobile termination service becomes a designated access service, a reduction in mobile termination rates should be phased in over a five-year period.

A five-year period is consistent with the duration of designated access services under the Act. Section 65(1) of the Act provides that, unless the period is extended in accordance with the Act, every designated service or specified service expires five years after the designated service or specified service came into force.

Vodafone also believes a five-year period would be appropriate as, until the Commission's recent announcement of its investigation into mobile termination rates, mobile network operators in New Zealand have not had any notice of a need to plan for adjustments to mobile termination rates. As a result, the potential regulation of mobile termination rates has not been anticipated in business cases for Vodafone's major projects referred to above.

A five year period would also allow the Commission the opportunity to monitor market developments, particularly in relation to the issue of pass-through.

Question 7.2(d) – What mechanism should be used for such a reduction?

This question is answered below.

9.3 Initial pricing principle

Before proposing an appropriate initial pricing principle, Vodafone has some brief preliminary comments in response to the Commission's discussion of the initial pricing principle.

First, the Act does not require the initial pricing principle to be applied relatively quickly. The Commission must make reasonable efforts to determine the price within 50 working days, but is not required to.

Secondly, while the initial pricing principle should be less rigorous than the final pricing principle, it need not be straightforward, particularly if a final pricing principle is delayed and not back-dated.

Question 7.3(a) – What is an appropriate initial pricing principle?

If the mobile voice call termination service becomes a designated access service, Vodafone considers that an appropriate initial pricing principle would be one that moves rates towards the socially efficient price for termination services. As explained in relation to the final pricing principle (see our answer to question 7.4 below), the socially efficient price for termination has three elements. It is defined as the long-run incremental cost of termination plus a Ramsey-based share of fixed

and common costs plus a term that depends on the value of the external benefits other phone users receive from mobile subscriptions.

Vodafone recognises that estimating the socially efficient price of termination will take some time, and that this price is therefore not well suited to being the initial pricing principle. For reasons discussed below, Vodafone also believes that benchmarking is not suitable as an initial pricing principle. Instead, we submit that the initial pricing principle should ensure that termination rates continue to decline at the same average rate as has been observed in recent years. This could be readily defined in a CPI-X framework, where X is set at level consistent with recent declines in termination rates.

To illustrate, let P_0 be the termination rate seven years ago and P_7 be the current termination rate expressed in the same real terms as P_0 , so that both prices are expressed in currency with the same purchasing power. The relevant X factor can then be found by solving the following equation for X:

$$P_0 (1-X)^7 = P_7$$

Which implies that $X = 1 - \sqrt[7]{(P_7/P_0)}$.

Using Vodafone data between April 1998 and April 2004 in this formula results in an X value of 10%.

This pricing principle creates a relatively steep glide path, which would reduce termination rates on an ongoing basis. It avoids the difficult problems that would arise under benchmarking and are discussed further below. It also has the major advantage of predictability, which would be highly valued by both suppliers and purchasers of termination services. To the extent that the Commission can resolve the competitive weaknesses in the retail markets for F2M services, this initial pricing principle would underpin a sequence of price cuts for those services, and as noted above would provide the Commission with a valuable opportunity to monitor the evolution of the retail market.

Question 7.3(b) – Is benchmarking appropriate?

Benchmarking has been used by the Commission as an initial pricing principle in several circumstances. It has proven less satisfactory than might have been expected as a result of a range of implementation issues, including:

- the selection of suitable comparator countries;
- the need for adjustments to reflect cost or other differences;
- exchange rate conversion issues; and
- the subjectivity associated with selecting a point from the resulting range.

Vodafone considers that all of these issues would arise if the Commission attempted to use benchmarking as the initial pricing principle for termination rates. It would be our strong view that the only sensible comparator countries would be those that have regulated prices using a direct estimate of the socially efficient price of termination as defined above. However we believe that there are not many countries in this set, if any, which would pose significant difficulties for a benchmarking study.

As a result, Vodafone recommends that the Commission avoid the use of benchmarking in this case.

Question 7.3(c) – Could cost proxies be used?

Vodafone believes it would be misleading for the Commission to use retail call charges as a proxy for the cost of mobile call termination.

In paragraph 123, the Commission suggests that an estimate of the upper bound of the cost of mobile call termination could be derived from halving the cost of the cheapest average off-net mobile-to-mobile call available to an individual under a post-paid plan. The Commission notes that cheaper rates are available for on-net calls and states that this suggests a lower marginal mobile termination cost.

However, as the Commission acknowledges, the retail call charge alone does not give an accurate indication of the cost of mobile call termination as (post paid) customers who receive the benefit of that rate must also pay a fixed monthly access fee and may also pay for other services provided by Vodafone.

Therefore, the cost of mobile call termination is not necessarily reflected in the retail call charge alone, but instead may be allocated to other elements of the pricing associated with the particular plan, or to other services provided by Vodafone.

Further, some on-net retail call charges, such as those offered in respect of Telecom’s Team Builder plan, are only available in respect of calls made between members of a limited closed user group, and are not generally available.

An additional point is that using retail call charges as a proxy for the cost of mobile call termination would restrict the pricing of, and constrain reductions in, retail call charges. This is because operators would be incentivised to maintain the level of retail call charges to avoid any lowering of the mobile termination rate.

For these reasons, we believe it would be misleading and inappropriate for the Commission to derive a “rough proxy” of the cost of mobile call termination by halving retail call charges for off-net or on-net mobile-to-mobile calls.

As outlined above, a certain amount of rigour must be applied to the initial pricing principle.

Question 7.3(d) – Is an interim pricing principle needed at all or could the price just be specified?

Vodafone assumes the Commission is referring to the “initial pricing principle” in question 7.3(d), and answers on that basis.

We do not believe that a price could be specified in replacement of an initial pricing principle for a designated access service. Nor do we believe that a price would constitute an initial pricing principle.

There must be an initial pricing principle in any new designated access service.

The Act is quite clear that, where an access seeker has made an application for a designated access service and has sought determination of the price payable for the service, the Commission must make the determination in accordance with the relevant initial pricing principle.

As noted in our answer to question 7.2(b) above, subsection 29(c)(i) of the Act provides that a determination for a designated access service must be made in accordance with the applicable initial pricing principle.

Therefore every designated access service which is included in Schedule 1, Part 2, Subpart 1 of the Act must include an initial pricing principle.

Vodafone considers it to be very unlikely that an actual price specified in the “initial pricing principle” description of a designated access service would be sufficient to constitute a workable designated access service initial pricing principle for the purposes of the Act.

Section 5 of the Act defines the phrase “applicable initial pricing principle” by reference to the parts of the Act where the principles are set out, and is therefore not particularly helpful:

“applicable initial pricing principle”, in relation to a designated access service, means the initial pricing principle described in subpart 1 of Part 2 of Schedule 1 as the initial pricing principle for the designated access service

Vodafone believes that it is fundamentally important that any regulated price setting by the Commission must be done on the basis of particular facts and circumstances at the specific time the Commission would be required to prepare a determination. This is the only way the Commission can ensure that the information it uses to calculate a price is the most up to date and accurate.

Indeed, in our experience this is the reason why pricing principles are expressed as principles. It is necessary for a pricing principle to be generic, with at least one or two input variables. For example, the words “retail price” which occur in a number of the current designated access services are a variable. They require the Commission to assess the current retail price for the relevant service at the time the Commission is preparing its determination. When the retail price is found, the Commission then needs to use that particular retail price in the application of the initial pricing principle. This will produce a regulated price which both access seekers and access providers can be confident is reflective of current conditions

Question 7.3(e) – How could an interim pricing principle incorporate a staged reduction over time, if that is desired?

As noted above, Vodafone is strongly of the view that, if the Commission decides to recommend designation, a staged reduction over time is essential to mitigate the potentially very serious consequences of such an intervention in the complex and rapidly evolving mobile services industry.

The initial pricing principle we have outlined in response to question 7.3(a) does incorporate a staged reduction over time.

9.4 Final pricing principle

Question 7.4(a) – What is an appropriate final pricing principle?

The final pricing principle should be one that sets a socially efficient price and a glide path for transitioning to that price. This price will be related to the cost of supply, but social efficiency requires that it also be related to demand characteristics.

The starting point is an estimate of the incremental costs of the service at issue, which should be constructed using a bottom-up cost model. Vodafone submits that this model should include two networks: a 2G and a 3G network; since this is consistent with the best-in-use principle that underlies telecommunications cost modelling for regulatory purposes. In particular, end-users will get the best available service if the upgrade to 3G progresses.

The long-run incremental cost of termination may also include a contribution to the TSO cost depending on how the Commission defines liable revenues (interconnection revenues included or not) for the purpose of assessing TSO levies.

The long-run incremental cost of termination, as estimated in such a model, is not the socially efficient charge for termination however, because it omits any contribution to common costs, and it ignores demand side externalities.

Mark-up for fixed and common costs

TSLRIC-based access prices should include a contribution to fixed and common costs.

As the ACCC has previously recognised, failing to account for the recovery of these fixed and common costs may not allow access providers to earn sufficient revenue to recover their costs over all the services they provide and may reduce incentives to maintain and invest in infrastructure, and distort the choice of technology towards technologies with low common costs²⁷.

In relation to the determination of a TSLRIC-based price for the mobile termination service, the ACCC considered that an 'equi-proportionate' mark-up (**EPMU**) was an appropriate method for allocating fixed and common costs. An EPMU approach involves measuring the directly attributable costs of each service within the group of services and allocating the fixed and common costs based on each service's proportion of the total directly attributable costs.

Vodafone considers that fixed and common costs are most efficiently recovered, in the sense of generating welfare-maximising outputs, by the Ramsey mark-up rule. Under this approach, the prices of different goods are marked up relative to marginal cost in inverse proportion to their relevant super-elasticities. Therefore, relatively higher contributions to common costs should be made by the least price

27 ACCC, Mobile Services Review – Mobile Terminating Access Service, June 2004, page 209

sensitive service. This is consistent with modern economic theory on the efficient pricing of communication networks.²⁸

Vodafone recognises that issues have been raised regarding the robustness of data available to calculate the relevant elasticities for the purposes of a Ramsey mark-up. However, this is likely to improve as more data is collected in more countries and the length of the available time series increases.

Further, analysis commissioned by Vodafone Group²⁹ suggests that the EPMU approach taken by some regulators is not justified. EPMU does not reflect the way prices are set in a competitive market. In the case of termination rates, EPMU significantly underestimates the socially efficient share of fixed and common costs that should be borne by termination rates.

Mark-up for network externalities

Vodafone also considers that there should be a further mark-up to take into account network externalities.

The following description of externalities has been taken from Vodafone Australia's June 2003 submissions to the ACCC:³⁰

“3.12 Externalities are relevant if the production or consumption of a good has an impact on the welfare of individuals not involved in the market. In these cases, the competitive market equilibrium can be expected to maximise the private welfare of the consumers in the market, but will not maximise social welfare because the market does not by itself take into account the social cost of benefit imposed on others. In the mobile services market, we consider that there are two externalities that are relevant:

- the subscription externality; and
- the option externality.

3.13 The subscription externality arises from an individual consumer's decision to subscribe to the mobile network, since that decision generates benefits to existing phone subscribers who place value on calling the new subscriber on his or her mobile phone.

3.14 The option externality arises from the ability of the subscriber to make calls or of others to call the new subscriber, regardless of whether any calls are actually made.”

In both cases, these externalities are benefits that phone-users at large receive when an additional person takes mobile service. It is not difficult to imagine cases in which they might be of significant size. For example, parents value the option to call their children when they are in different locations.

Because of these effects, a social planner would be inclined towards lower charges for mobile subscriptions, with the result that penetration rates would be higher than those resulting from open competition. This requires that a greater contribution to costs is required from other services, notably from termination services. It is

²⁸ See J-C. Rochet and J. Tirole “Platform Competition in TwoSided Markets”, Journal of the European Economic Association, June 2003, v. 1, iss. 4, pp. 990-1029.

²⁹ *The Importance of Price Elasticities in the Regulation of Mobile Call Termination* by Dan Elliott, Director, Frontier Economics [2004]

³⁰ Vodafone Australia, *Mobile Services Review 2003 Discussion Paper*, 13 June 2003, page 6.

important that this effect be factored into the Commission's analysis of the socially efficient final pricing principle. Vodafone is willing to discuss these issues further with the Commission in the event that it decides to regulate this service.

Glide Path

It is important that the Commission include a glide path explicitly in the final pricing principle. Failure to do so would induce access seekers to make a pricing review application at an early stage in order to avoid the glide path contained within the proposed initial pricing principle.

Vodafone therefore submits that the final pricing principle should state the formula by which the socially efficient termination rate will be determined and the formula by which prices will transition to that efficient termination rate. We believe that the glide path duration should be the same as the one we have recommended for the initial pricing principle. As with the initial pricing principle, the starting point should be the existing rates in the market.

Question 7.4(b) – Is it necessary to require TSLRIC pricing?

As noted above, Vodafone believes that TSLRIC forms one of three components of a socially efficient termination rate. We therefore believe that calculating the TSLRIC of termination service is necessary but not sufficient for the final pricing principle.

Question 7.4(c) – Should TSLRIC pricing be delayed for several years?

If the Commission recommends designation of mobile termination, Vodafone believes that it will eventually need to estimate the socially efficient termination rate. However, we have also explained why a glide path is greatly superior to any other alternative. If the socially efficient price is not estimated at an early stage, we would be concerned that the glide path is inefficiently aggressive. We therefore consider that, if this service is designated, it will not be possible to delay estimating the socially efficient price. And since that price requires a TSLRIC estimate as one of its components, it is unlikely to be possible to delay estimating the TSLRIC of termination.

We note that under the Act, the final pricing principle can be invoked by any firm that buys or sells a designated service making a pricing review application. The timing of any implementation of the final pricing principle is therefore not within the Commission's control, except to the extent that it can decline to recommend designation. Vodafone is strongly of the view that there is no case for designation.

Question 7.4(d) – Could the application of a final pricing principle be delayed for several years? If so, how?

Vodafone believes the current wording of the Act does not permit the application of a final pricing principle to be delayed for several years, except by means of the Commission declining to recommend designation.

If the service is designated, then section 47 requires the Commission to prepare a draft pricing review determination as soon as practicable after the access provider has calculated the price payable for the service (if applicable) or after receiving a pricing review application.

Vodafone acknowledges that the fact there is less international experience with the development of cost-based models for the pricing of mobile services than for fixed line services is a concern.

However, this is even more of a reason why the Commission must be absolutely certain before recommending regulation that the regulation it proposes is based on the most robust pricing principles available, that are capable of dealing with the complexities of all of the issues that are involved. If the Commission is not certain of this then this is another reason why it should at least delay making such a recommendation.

Question 7.4(e) – How could the final pricing principle incorporate a staged reduction over time, if that is desired?

For reasons discussed above, Vodafone is strongly of the view that any final pricing principle must incorporate a staged reduction over time. We also believe that a final pricing principle could incorporate a staged price reduction over time by:

- adopting a formula which can be used as the final pricing principle for the new designated access service; and
- additionally, if necessary, providing for regulations that specify how the final pricing principle must be applied (pursuant to section 29(c)(ii)).

As noted in our answer to question 7.2(b), the Act can accommodate a formula being used as a pricing principle.

Formulas are already used as pricing principles in the Act, and our answer to question 7.2(b) also discusses how a formulaic pricing principle can achieve staged rate reductions over time.

Regulations for applying the final pricing principle

The Act also provides a mechanism which can be used by the Commission in the application of the pricing principles.

Regulations could be drafted on such matters as how the Commission must use the formula to calculate price at given points in time throughout the control period, how the variables are to be collected and then inputted into the calculations, where the source data for the variables must source from, minimum quality and reliability standards for source data, and so on.

Section 29(c)(ii) is flexible enough to allow any regulation which will specify how the final pricing principle must be applied. We believe this gives the Commission sufficient ability to implement a staged price reduction without any uncertainty.

Potential argument that Commission can only include one price in its determination

As with the initial pricing principle, there is a potential argument that the Act only allows the Commission to set out a single price in its determination for a designated access service. We are not convinced by this argument for the reasons given in response to question 7.2(b) above. However, even if this argument was successful, using a formula satisfies this requirement anyway.

9.5 Conditions

Question 7.5 – What conditions do respondents consider should be included in the service specification (if any) and why?

Vodafone strongly believes that an explicit condition is required to address the issue of pass through.

Vodafone proposes that the eligibility of an access seeker to obtain regulated reductions in the price of the mobile termination service should be evaluated periodically and should be conditional upon the access seeker demonstrating that it passed through to end-users all reductions from the previous period in the form of lower fixed-to-mobile prices.

Vodafone is considering further whether any other conditions would be appropriate should the mobile termination service become a designated service.

9.6 Other parts of Service Specification

Question 7.6 – Do respondents have any views on the wording of the other parts of a service specification for mobile termination and whether any new parts are needed?

Section 45 requirement

Under section 45(1) of the Act, the Commission may, on receiving a price review application, require the access provider to calculate the price payable for the service.

Subsection (2) provides that, if requested to calculate the price, the access provider must do so in accordance with the applicable final pricing principle and any regulations that relate to the applicable final pricing principle.

Subsection (2) is subject to any requirement set out in subpart 1 of Part 2 of Schedule 1 of the Act in respect of the applicable final pricing principle.

In respect of the designated access services “Interconnection with Telecom’s fixed PSTN” and “Interconnection with fixed PSTN other than Telecom’s”, subpart 1 of Part 2 of Schedule 1 specifies that, if TSLRIC is the final pricing principle, the Commission must require the access provider to calculate the price payable for the service in accordance with TSLRIC and any applicable regulations.

If the mobile termination service becomes a designated access service and an application is made by an access seeker in respect of Vodafone as an access

provider, Vodafone would expect to be required to calculate the price payable for the service, on the assumption that the final pricing principle for the mobile termination service would be similar to the final pricing principle for the designated access services described above (where that final pricing principle is TSLRIC).

Vodafone is considering other parts of a service specification and will provide comments to the Commission.