

**TELECOMMUNICATIONS ACT 2001:
SCHEDULE 3 INVESTIGATION INTO
REGULATION OF MOBILE TERMINATION**

Submission by



**The Telecommunications Users
Association of New Zealand**

To



COMMERCE COMMISSION

July 2004

- 1. Introduction and process**
- 2. Legal framework**
- 3. Decision Making Framework**

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

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

Response: The Telecommunications Users' Association of New Zealand (TUANZ) has been very satisfied with the Commission's legal and decision making processes and frameworks in past enquiries and accordingly extends this faith to the current investigation.

4. Market Issues

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

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

Response: TUANZ concurs with the Commissioner's market definition of relevant wholesale and retail markets and agrees that there is a distinct market for the termination of mobile calls.

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

Response: Although in some cases call transport can be a component of the total call cost, for the purposes of this investigation it is negligible compared to origination and termination charges. Therefore the issue of call transport should not materially affect the investigation into termination charges (which are the central focus of this investigation).

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

Response: TUANZ' primary motivation for requesting this enquiry arose from members unhappy with the high prices of fixed-to-mobile calls. However, with the emergence of SMS and other mobile data services, similar interconnection issues may arise in the future that may need to be addressed in a similar manner.

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?

Response: In TUANZ' view, not at all. Evidence of this is suggested by the fact that all mobile phone subscription offerings refer only to the cost to the caller. They never allude to the costs that other users will incur in calling the subscriber as a potential factor in a mobile phone subscriber's purchase decision. Mobile phone subscription offerings also never allude to mobile termination charges and indeed most users would not even know that mobile termination charges exist.

At present, the only price signal a fixed-to-mobile caller can give to indicate that termination charges are too high is to not call the mobile phone at all. The resulting market power that the terminating carrier thus holds is in essence the primary motivation for this investigation.

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

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

(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?

Response: The Commissioner establishes in Paragraph 123 sound evidence that mobile termination charges are above cost and TUANZ concurs with this finding. The Commissioner illustrates in Paragraph 124 compelling evidence of market power from mobile carriers, hence showing that mobile termination markets have a distinct lack of competition.

Indeed, as the Commissioner points out in Paragraph 120, Telecom and Vodafone charge each other identical mobile termination rates of 30 cpm. It is highly unlikely that the underlying termination cost for both networks is identical, suggesting that this particular environment is a market-oriented (as opposed to cost-oriented) duopoly with no incentive to drop prices.

Also, the price for business users of on-net mobile-to-mobile calls (e.g. Vodafone-to-Vodafone) is very much lower than that for off-net mobile-to-mobile calls (e.g. Vodafone-to-Telecom mobile). Since the only additional cost incurred by the originating carrier (in this case, Vodafone) is the termination charge, this appears to be *prima facie* evidence of unreasonably high termination charges.

Also, it is often observed in commercial contracts and tenders that call rates from one's own mobile to one's own office fixed line are substantially cheaper than one's own mobile to any other fixed line.

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

Response: TUANZ believes that the Commissioner's proxy estimate of mobile termination charges as calculated in Paragraph 123 is a reasonable starting point to establish basic benchmark information without the need to embark on detailed cost-benefit analysis.

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

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

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

Response: TUANZ believes that overseas cost studies are relevant, particularly those from countries with similarly low population densities and high mobile phone penetration rates (for example Ireland and the Scandinavian countries).

There has been no evidence to suggest that New Zealand mobile networks have a higher or lower cost structure than overseas networks. New Zealand's diseconomies of scale (resulting from its low population density) are somewhat offset by sound government telecommunications policy that has enabled mobile carriers to obtain spectrum at relatively low cost.

The *OECD Communications Outlook 2003*¹ contains a schedule comparing mobile phone charges for low, medium and high users in member nations as at August 2002 (on a US Dollar purchasing power parity (PPP) basis). Of the thirty member nations, New Zealand low, medium and high mobile phone users faced the eleventh, fourth and fourth highest charges respectively. The fact that the probability of this situation occurring by chance is no more than 0.65%² is strong evidence that New Zealand mobile phone users face significantly higher call charges than their overseas counterparts.

Since August 2002, subsequent regulation of other OECD member countries' mobile termination charges has meant that mobile phone charges faced by New Zealand users are likely to be even more significantly different to those faced by overseas users.

These are international factors that TUANZ hopes that the Commissioner will consider in arriving at his conclusions.

¹ OECD Communications Outlook 2003, pp. 186-188; available online at: <http://www1.oecd.org/publications/e-book/9303021E.PDF>

² $\frac{11}{30} \times \frac{4}{30} \times \frac{4}{30} \leq 0.0065$ (assuming independent random relative mobile user charges)

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?

(h) Is it valid to then take half the lowest average mobile-to-mobile calling cost as an estimate of the upper bound of mobile termination cost?

Response: In the absence of any other data, it is valid to suppose that half the network costs can be attributed to the originating call and half to the call termination as a baseline assumption.

It is valid to assume that mobile carriers do not connect calls at a loss. Therefore it would seem reasonable to use the lowest average mobile-to-mobile calling cost as an estimate of the upper bounds of mobile termination costs, if only as a starting point for further analysis.

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?

Response: The fact that New Zealand mobile termination charges are significantly higher than other countries is sufficient evidence in itself that regulation is required. The actual detailed calculation of the cost of mobile termination could then follow in due course.

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

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

Response: Please refer to the responses given to **Question 4.1(e)** and **Question 4.2(c)**.

Question 4.3 (c) Has pre-selection had an impact on competition in this market?

Response: TUANZ believes that the option of pre-selection is not widely known or understood by users and therefore not a significant driver of competition in this market. Its primary purpose has been to enable providers of toll bypass services to receive call revenue for land to cellular calls, rather than simply toll calls.

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

Response: Since demand for fixed to mobile calls is not completely inelastic, a price reduction in fixed to mobile call rates would grow the market for these calls. Revenue losses from lower prices would be at least partially offset by a correspondingly higher volume of calls.

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?

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

Response: e) Despite the gradual and ongoing reduction in mobile termination charges, Telecom and TelstraClear have retained the retail cost of fixed to mobile calls at 71cpm because there is extremely limited competition in the residential market. There is limited incentive to reduce these charges which for Telecom enable monopoly profits and for TelstraClear a means of subsidising losses elsewhere.

f) There is an illusion of competition in the residential market; however in practice this is extremely limited. Barriers to competition include:

- Multiple billing issues (land line, cell phone, internet and toll charges)
- Lack of ability to choose fixed line provider as Telecom holds the fixed-line network monopoly
- Bundling of competitive of residential fixed line charges, SPOT features such as Call Minder/Call Waiting, associated tolls and Internet, meaning that users must overlook otherwise competitive offerings.
- Lack of number portability (for those limited areas where alternative networks have been deployed)
- Inconvenience of coded access

The recent determination on residential line wholesaling provides very limited margin for competitors and to date, no one in the market is offering this service.

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

Response: TUANZ views the retail mobile-to-mobile market as a duopoly with little incentive for price competition. There is not an efficient and effective market for wholesale mobile services, TelstraClear being the closest to a wholesaler of Vodafone services - able to bill the customer yet still offering a Vodafone service. The market therefore is dominated by mobile resellers who resell either Telecom or Vodafone mobile offerings.

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

Response: The fact that New Zealand does not have any Mobile Virtual Network Operator Profiles (i.e. wholesalers that add value to the mobile capacity that they purchase from the network operators) indicates that competition in this market is limited. There is no incentive for either mobile operator to encourage this type of wholesaling as the market penetration in New Zealand is high and they do not need it to stimulate demand. However, it should be noted that the duopoly at this point seems to be working at a retail level as innovation and competitive pricing seems a feature of the New Zealand market.

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

Response: It is possible that more competitive mobile resellers and wholesalers would emerge, but this would depend on other factors such as a wholesale call origination offering. Toll bypass providers would have greater incentive to expand their offerings, particularly if it could be bundled with residential lines and broadband Internet.

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

Response: This trend would be retarded slightly because in some instances (i.e. when both a fixed line and a mobile phone are simultaneously available to the caller) users would be likely to substitute mobile-to-mobile calls with the relatively more competitively priced fixed-to-mobile calls.

5. Counterfactual and Factual

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

Response: The status quo will prevail – high mobile termination charges would continue to be used by mobile carriers as a “cash cow” to fund other areas of their businesses. The mutual lowering of mobile termination rates by Telecom and Vodafone (as described in Paragraph 120) should not be interpreted as a pass-through of cost savings to end users but instead as a rational response aimed to pre-empt the threat of regulation.

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

Response: If the Commission was not to regulate this market, the current situation would deteriorate as the mobile network operators could feel vindicated in setting high mobile termination rates and thus possibly raise them even further.

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

Response: Yes, but as a whole the market will not be affected greatly, as these new technologies (e.g. VOIP) have much narrower applications that sit only on the peripheral of the mobile termination market at this stage.

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?

Response: None whatsoever.

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

Response: Since there is effectively only one fixed network operator (Telecom), there will be no incentive for it to significantly reduce retail fixed-to-mobile prices. (See also response to **Question 4.3**).

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

Response: End users will enjoy lower fixed-to-mobile call charges, but only if fixed and mobile network operators are required to pass on mobile termination cost savings (as well as a *pro rata* portion of profit margin) to end users. If mobile phone termination rates only are regulated, Telecom’s fixed line division has the opportunity to make windfall profits, which is not the aim

of this investigation. If the Commissioner also regulates call prices then these benefits will flow onto to millions of users across the economy.

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?

Response: Because Telecom's fixed line network monopoly gives it no incentive to pass through any savings to end users. Vodafone is not in a position to pass through this decrease, as it does not own a fixed line network. If the decrease was not passed through to end users, then Vodafone would stand to lose termination revenue, but Telecom New Zealand would stand to gain as they increase their margin on all Vodafone terminated calls. Indeed, there is a risk that Telecom could use the resultant windfall profits to aggressively win back market share from other mobile and fixed telecommunications providers.

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

Response: The competitive responses of Telecom and TelstraClear cannot be accurately anticipated - one or both carriers could implement higher margins or lower prices, or elements of both.

But the ability of Telecom and TelstraClear to retain the 71cpm residential fixed-to-mobile rate, despite a reduction in mobile termination charges and in the presence of lower-priced-competitors, is evidence that any pass-through could take a long time or not occur at all.

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

Response: TUANZ surmises that in TelstraClear's case, reductions in mobile termination rates have been used to cross-subsidise other areas of their business. It is suspected that Telecom has used the situation to make windfall profits because of a lack of incentive to lower mobile termination rates.

Question 5.2 (e) Would it be feasible for the Commission to include a term any mobile termination determination that the reduction in price be passed through to end-users?

Response: TUANZ' primary objective in pursuing mobile termination regulation is to achieve lower calling costs for telecommunications users. End users do not complain about excessive mobile termination rates in themselves but instead about the excessive call prices resulting from the high termination rates.

Regulation without ensuring pass-through of savings would essentially defeat the purpose of the legislation.

Although price control would appear to limit opportunities for competition in mobile termination, it may be a necessary condition to ensure that at least part of the saving in mobile termination charges is passed on to the end users in the form of lower call prices.

It must be noted that an equitable mobile phone call price control regime would not necessarily mean that network operators earn no margin on mobile termination, but that they earn an equitable return (c.f. regulation of rail operators in the US).

In the absence of a call price control regime, regulation of mobile termination charges would reallocate costs among carriers in a more equitable fashion. Although the end user might not see any short-term fall in price, in the long run the user could benefit from a more competitive and fairer 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?

Response: Stimulation in fixed lines wholesaling and broadband internet services would encourage pass-through of mobile termination rates. This form of product unbundling would encourage entry of new fixed-line providers and therefore increase the likelihood of price competition in the fixed-to-mobile market.

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

Response: Possibly, but this situation is likely to be reasonable in a “user pays” mobile connection environment. This is because the market will decide whether operators can absorb the reduction through their margins or will need to recoup these costs through other means. Since an end user has a choice of mobile carrier to subscribe to, and therefore can send price signals to mobile carriers, there is not the market failure as observed in mobile termination charge markets.

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?

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

Response: Yes – in the case of handset subsidies, mobile carriers use mobile termination charges collected from existing network users to subsidise the subscription of new users. TUANZ views such an internal transfer between users as undesirable in principle.

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

Response: Yes – advertising expenditure in the mobile phone sector is one of the highest across the economy. TUANZ believes that excessive amounts of money are being spent on brand advertising and new acquisitions. Since mobile penetration rates have reached high levels in New Zealand, the marginal benefit of an additional mobile phone subscriber to a network is very much lower than it once was. Therefore the fact that such large amounts of money are still being invested in promoting a less and less profitable activity (i.e. subscription acquisition) is possible evidence of an underlying subsidy.

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

Response: Ramsey pricing is very prominent – services that have high demand elasticity (e.g. handsets and introductory plans) are priced with low mark-ups, whereas services with very low demand elasticity (i.e. termination charges) appear to have very high mark-ups. But because of the relative maturity of the New Zealand mobile telephony market, positive network externalities resulting from additional users subscribing are becoming less and less significant. This therefore implies that Ramsey pricing is an increasingly less credible justification of mobile termination charges.

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

Response: As TUANZ is not privy to specific profitability information of either Telecom or Vodafone, it would appear that this issue is best addressed by the Commissioner.

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

Response: As with any other business, accounting performance measures such as:

- ROI (Return on Investment)
- EBITDA (Earnings Before Interest, Taxation, Depreciation and Amortisation)
- EVA (Economic Value Added)

are considered by TUANZ to be appropriate profitability measures.

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

Response: TUANZ sees no reason for reasonable WACC for mobile networks to be any different from any other network-oriented businesses.

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

Response: TUANZ concurs that the Commissioner's discussion on economic efficiencies and inefficiencies as seen on Paragraphs 167-178 is a realistic view of the likely results of regulation.

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

Response: TUANZ believes that there are no technical barriers to lowering of mobile termination charges – it is purely a pricing issue.

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?

Response: There would be no discernable impact; Telecom has long used the fact that it is both a fixed line and mobile network operator to forestall any erosion of its market share. The current duopoly that Telecom and Vodafone hold in mobile telephony is a natural result of the New Zealand environment's inherent market forces.

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

Response: Temporary but subject to ongoing review with an option to making permanent legislation, should future market outcomes require this.

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

analysis?

Response: As in Question 4.2 (i), there is little need for a full cost-benefit analysis for an interim determination as the benefits to telecommunications users of lower termination charges are already so compelling. An initial full cost-benefit analysis would be likely to result in extended lobbying by mobile network operators and would cause the Government and the telecommunications industry to incur significant additional and unnecessary costs.

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

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

Response: TUANZ concurs with the Commissioner's determination of regulation costs and their categories as shown in Paragraph 202.

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

Response: TUANZ has no further quantitative costs and benefits to suggest for consideration other than those already listed.

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

Response: As noted in the response to Question 2.4 (d), substitution from mobile-to-mobile calls to fixed-to-mobile calls (where this is possible) could lead to a decrease in demand for mobile-to-mobile calls and thus a lower price for mobile-to-mobile calls. These lower call prices could then encourage more users to subscribe to mobile networks who previously may have been discouraged by the higher call prices. More mobile phone network subscribers are therefore a positive network externality and make the case for regulation even stronger.

7. Service Specification

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

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

Response: The mobile termination service should be described as follows: “The act of termination of a call on any cellular handset, regardless of the underlying technology used.”

(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?

Response: There are two effects here that act in opposite directions.

- Termination costs on a 3G network need to recoup the costs of investment required to create that network. It should be noted that a 3G network is not a completely new network but an upgrade of existing network infrastructure, so any costs are at the margin.
- Termination costs on a 2G network rise over time due to increased obsolescence.

In the long run it is expected that these costs will approximately cancel each other out and therefore not be substantially different from the present.

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?

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

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

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

Response: A phased reduction over a number of years is acceptable provided that the initial reduction is substantial and provided that the timeframe is limited.

Whether a staged rate reduction can be managed given the current wording of the Act is a legal matter to be determined by the Commissioner.

New Zealand is one of the last countries in the OECD to have mobile termination charges regulated, so the sooner this issue is addressed, the sooner users will benefit.

TUANZ believes that an appropriate period for mobile termination rate reduction is 3 years or less.

A reduction of the ratio 50%-25%-25% in three consecutive years is considered a desirable mechanism by TUANZ.

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

(b) Is benchmarking appropriate?

(c) Could cost proxies be used?

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

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

Response: TUANZ believes that cost proxies are an appropriate means of establishing a baseline pricing principle that will enable an interim decision to be made according to the New Zealand market environment.

Benchmarking should then be used as a means of validation. A specified price is desirable because interim pricing would be likely to lead to prolonged lobbying by affected parties.

It is desirable that every three years a cost proxy and benchmarking exercise to establish whether New Zealand mobile termination charges are adequately aligned with those of comparable countries.

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

(b) Is it necessary to require TSLRIC pricing?

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

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

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

Response: TUANZ believes that TSLRIC pricing may not be required if other benchmarking mechanisms can be used. Whilst a full cost analysis may prove helpful, it is likely that the time and cost in undertaking this exercise is likely to outweigh any benefits that might accrue, particularly if proxies

and benchmarking can be used to establish acceptable approximations of costs.

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

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?

Response: TUANZ has no other suggestions of conditions of service specification, or on the wording on the other parts of a service specification.