

**Mobile Termination Draft Report
Network Access Group
Commerce Commission
P O Box 2351
Wellington**

**DRAFT REPORT ON WHETHER MOBILE TERMINATION
SHOULD BECOME A DESIGNATED OR SPECIFIED SERVICE**

**SUBMISSION FROM THE
TELECOMMUNICATIONS USERS ASSOCIATION OF
NEW ZEALAND INC**



27 November 2004

Response to Draft Report and Recommendations

TUANZ supports the thrust and general conclusions of the Commission's draft Report and draft Recommendation regarding fixed to-mobile calls, and in particular strongly supports the need for designation of voice call termination on mobile networks. TUANZ agrees with the Commission's analysis of deficiencies in the state of competition in this market. TUANZ believes that the economic benefit that will derive from regulation in this market is likely to be greater than the estimate of the Commission, which TUANZ considers to be conservative.

However, TUANZ does not believe that the Commission has correctly analysed the markets for mobile-to-mobile termination or for termination of voice calls on 3G networks, and in consequence the draft Recommendation unreasonably excludes these two significant segments of mobile termination.

Mobile-to-mobile termination

At paragraph 79, the Commission correctly recognises that mobile-to-mobile termination across networks is not different, for termination purposes, from fixed-to-mobile termination. Only the origination differs, and the Commission has correctly rejected submissions that the origination and termination markets should be considered a single service market. But at paragraphs 173-174 this factor is overlooked in conflating termination with all other elements of mobile services, without explanation.

In the context of the markets defined in this inquiry, only "on-net" mobile termination could be considered as intrinsically bundled with other services of a subscriber's home mobile network. Noting the distribution of market shares of subscriptions to both mobile and fixed-line networks in New Zealand, it should be assumed that one third of all calls originating on a mobile network are likely to terminate on a different mobile network. Therefore mobile-to-mobile termination cannot reasonably be excluded from the mobile termination description.

Evidence of over-priced mobile termination rates is apparent in the substantial margins that exist between retail call charges for off-net calls and retail charges for on-net calls. These margins (often 100% for substantial volumes) cannot be explained by reference to the transaction costs of interconnection billing and settlements, nor by differing network costs of termination.

TUANZ is of the view that artificially-high termination charges between mobile networks are used to boost mobile network profits margins and to distort prices to end-users. Because all MNOs benefit from this activity, TUANZ considers this to be unacceptable price-fixing behaviour, albeit tacit. Differentials between "on-net" and "off-net" call prices are then used as marketing tools by MNOs to promote same-network subscriptions among business customers or other affiliated customer groups. TUANZ considers this to be a form of cross-subsidy for inter-network competition by market manipulation. It does not encourage efficient pricing, because the benefits are not distributed according to the charges to users and the price signals are unrelated to underlying costs.

Voice-call termination to 3G networks

TUANZ understands that operational 3G mobile networks incur significantly lower costs than 2G mobile networks in terminating voice calls that originate on non-3G networks. These lower costs ought to be reflected in lower termination rates on 3G networks than those offered by 2G networks. Certainly, no valid case has been made to exempt from regulation the termination on 3G networks of voice calls that originate on fixed line or non-3G mobile networks. However, recognising that the full scope of 3G network technologies and services continues to evolve rapidly, TUANZ could go along with a Commission that it may be too early to impose 3G-specific regulation at this stage.

Different regulation for termination on 2G and on 3G networks could create a distortion in the market whereby operators of 3G or networks purporting to be 3G could artificially cross subsidize components (such as call plans, handsets or origination charges) in effect forcing users to upgrade to 3G to avoid regulated lower termination charges on their 2G network.

Further discussion is in responses (below) to the specific questions on which the Commission has sought advice.

Responses to Questions posed by the Commission

Chapter 5

Question 5.1: The Commission is seeking the views of parties on the likely impact of regulated mobile termination rates on retail mobile prices. The Commission is particularly interested in any quantitative assessment of the likely benefits or detriments arising in this market, including any assumptions made and data used.

Question 5.2: The Commission is seeking submissions on the cost-benefit analysis undertaken as part of this investigation, including specific submission on the assumptions and data used, and the general overall approach.

TUANZ considers that the cost estimates accepted by the Commission in this context are very generous to the network operators. Therefore, the margin for competitive efficiencies is likely to be substantially more than concluded in the draft report, and the scale of benefits from facilitation of competition through ex ante intervention is commensurately understated.

The evidence from TUANZ membership is that high mobile termination rates induce users actively to avoid making calls to mobiles. TUANZ therefore supports the Commission's finding that lower costs of calls would stimulate demand for users to make increased numbers of fixed-to-mobile calls.

TUANZ also agrees with the Commission that the "waterbed effect" is unlikely to occur if mobile termination is regulated, because the dynamics of a competitive market should prevent significant changes to subscription and handset subsidies.

Chapter 7

Question 7.1:

(a) Will regulation of 2G mobile voice termination and not 3G create price distortions and therefore problems for consumers?

Yes. This issue was considered extensively in the Ofcom procedure quoted by the Commission, and Ofcom's conclusions are instructive. Ofcom decided that while there was not sufficient information to make ex ante regulation on 3G to 3G termination, there was no distinction between terminating fixed line and 2G voice calls on a 3G network as compared to a 2G network:

*"Ofcom, as identified in paragraph 2.23 above, has defined a single market for mobile voice termination services on both the 2G and the 3G networks of each of Vodafone, Orange, O2 and T-Mobile,"*¹

Regarding the UK's only exclusively 3G mobile network (Hutchinson "3") Ofcom in the same procedure imposed rate monitoring requirements on 3G termination:

*"The obligations set out in this statement include a requirement on '3' to submit information to Ofcom on 2G call volumes and on total call volumes, and also to notify changes in charges for termination."*²

The UK legislation constrains Ofcom to imposing ex ante regulation only where there is post hoc evidence of exercise of significant market power. TUANZ considers Ofcom to have gone as far as possible, in those circumstances, to impose equivalent regulation on 3G networks as on 2G, in relation to voice call termination across networks. Ofcom forebore to impose 3G-specific regulation related to 3G's reduced cost structures for termination, but did not exempt 3G from general regulation on terminating voice calls from non-3G networks.

TUANZ considers that no case has been made for special exemption of 3G in New Zealand from any general obligations on voice call termination.

(b) If so, what will these problems be and how could they be solved?

1. The business case for 3G, for both investors and users, is that 3G employs a broadband communication platform to deliver:

- current-generation services at reduced costs, and
- premium services that cannot be provided through PSTN and 2G mobile service technologies.

¹ Ofcom: "Wholesale Mobile Voice Call Statement", 1 June 2004,

² *ibid*

If termination of voice calls is regulated on 2G services but not on 3G services, there is scope for 3G networks to oblige users of fixed line and 2G services to cross-subsidise 3G-only services to which they do not subscribe.

2. The Commission has identified that cost of termination of voice calls on 3G networks is likely to be substantially less than cost of terminating the same calls on 2G networks. This is all the more the case in New Zealand, where operators acquired 3G spectrum at reasonable prices, so no valid argument can be made regarding amortisation of excessive spectrum fees. Therefore 3G networks already have sufficient incentive to terminate 2G and fixed network calls without any special regulatory exemption.

3. Surplus profits from high termination rates for voice calls onto 3G networks would not benefit the users originating the call. Profits would either be capitalised, passed to shareholders (at the expense of non-3G subscribers) or would be used to subsidise competitive promotion of the 3G networks through advertising, handset subsidies, discounting etc. Furthermore, high termination charges onto 3G networks could be used to “punish” non-3G subscribers so as to create incentives to migrate to 3G services with higher subscription charges but lower termination charges.

4. The Commission has not referred to the treatment that should be given to calls originating on 3G networks and terminating on 2G or fixed-line networks. Exemption of 3G networks from regulation applying to 2G would result in asymmetric termination arrangements that would privilege 3G network operators against 2G network operators. TUANZ sees no argument that justifies such discrimination.

5. The solution to this set of issues is for the termination regulation to apply not to a specified type of terminating network, but rather to the service of voice call termination on any mobile cellular network, irrespective of the network technology employed.

Voice calls are only one of a growing number of telecommunication services that may be terminated on devices linked to mobile networks, but they are the essential and highest common factor linking all fixed and mobile networks.

TUANZ proposes that the termination service in this instance should be defined as “voice call telephony originating from any network or device including analogue, digital, and packet-switched configurations”. (see comments regarding definitions at (e))

(c) How would regulation of 2G voice termination and not 3G hinder take-up of 3G services?

Failure to regulate 3G voice-call termination may, in the first instance, privilege 3G networks against 2G networks, as described above. TUANZ considers that uneconomic take-up of 3G services might occur as a result of price advantages derived from inappropriate cross-subsidy of 3G services by non-3G users. This would be inconsistent with the Commission’s requirement under section 18 to consider “efficiency” in investment.

However, in the longer run exemption of 3G would have anti-competitive effects by reducing the ability of new 3G operators to enter the market and compete against incumbent fixed-line and 2G mobile operators who also provide 3G services.

Multi-network incumbents could offer bundles such as “on-net” call pricing to offset the higher 3G termination charges, recovering their own costs through internal transfer pricing. New 3G entrants would not have that opportunity for cross-subsidy and in consequence would suffer impaired ability to provide competition in the market. Reduced competitive market pressures would result in overall higher pricing for 3G and thus slower take-up. TUANZ regards this as contrary to the Commission’s obligation to promote competition in the long-term interests of the end-user.

(d) Can it be demonstrated by way of example how regulation of 3G voice call termination would adversely affect efficient investment in new technology?

TUANZ is aware of no credible such example, and considers that any disincentive attributable to non-discriminatory termination regulation would be trivial by comparison with other investment criteria - particularly demand for broadband mobile services not available on fixed line and 2G mobile networks.

Historical examples are few and do not reliably reflect current market factors. The technology and service mix of 3G networks is still maturing, and costs of capital equipment are declining rapidly as R&D costs are recovered and manufacturing reaches larger scale. Claims for high-cost, high-risk investment scenarios typically quote high prices of first run network products, and have been known to seek inclusion of speculative market-entry capital costs such as franchise fees, spectrum auction prices and marketing budgets, which TUANZ considers are not valid components of any forward-looking cost methodology.

Each generation of network investment goes through initial periods of negative cash flow until penetration reaches break-even levels. This ROI profile is perfectly understood and accepted by network investors. No underwriting of market risk by special regulatory treatment is justified.

(e) Should 3G networks be described more precisely in the service description, and if so, how should 3G networks be described?

For the purpose of regulating termination of voice telephony calls, TUANZ considers that no distinction is required for 3G networks and therefore no specific definition is required. Schedule 1 of the Act has already defined “third generation network” for the purposes of the Roaming service.

However, if the Commission wishes to specify an exemption of “3G networks” for termination purposes, then definition will be necessary and the existing definition might not be sufficient. For Roaming purposes, the technical specification of IMT2000 was appropriate because it defines the technical compatibility in use of the radio spectrum by mobile handsets that may roam, or not roam, from network to

network. This is not the case for termination of voice or data calls, where spectrum compatibility is not the issue but other aspects of service may create issues. “3G” networks are part of a continuum of developing network technologies that include fixed-line PSTN, 2G, 2.5G (2G mobile with enhanced data capabilities) and Internet as well as several variants of 3G developed through different standards development fora.

3G services and technologies themselves will continue to evolve before and during general deployment and market take-up.

Operators and vendors have been known to use the term “3G” loosely for any public network technology that can offer data transfer to mobile terminals above the minimum broadband threshold of 256Kb/s. Others say that such services are just enhanced versions of 2G, or “2.5G”. In New Zealand the incumbent has already embarked on an extensive advertising campaign encouraging the use of its “3G” network and there is a real risk of market confusion over what is, or is not, a “3G” network. If the Commission were to create a special regulatory environment for 3G networks, such a definition would be required urgently or would risk being overtaken by events in the market.

For the purposes of this inquiry by the Commission, TUANZ submits that the term “3G network” should be taken to apply only to a network that:

- meets the definition of “third generation cellular telephone network” already in Schedule 1 of the Telecommunications Act 2001, and
- offers backward compatibility to interconnection with basic fixed-line and 2G mobile networks for voice calls and messaging, and
- provides Internet Protocol connection to terminals at a rate consistently in excess of 256Kb/s.

The key issue for users is that a particular regulated service, such as voice call termination, should be regulated the same without special regard to the technology employed.

Therefore, TUANZ considers that debate over 3G implementation is a red herring to discussion of termination of standard voice calls onto mobile networks, because for voice-call termination purposes there should be no distinction between 2G, 3G or any later generation of network.

Question 7.3 Should the proposed alteration include a requirement that the Commission must require the access provider to complete a section 45 calculation for the mobile termination service?

Yes, where the Commission has received an application from an access seeker under section 43. In this context, 3G networks should not be excluded either from the obligations of access providers or the rights of access seekers.

Question 7.4:

(a) Should any provider or potential provider of fixed-to-mobile services be able to

apply to be an access seeker?

Yes, but it is also essential that any provider of mobile-to-mobile services have the same rights. TUANZ believes that these rights would exist under the current Act and should not be curtailed by an inappropriate service definition.

(b) If not, what conditions should apply and why?

N/A

(c) Are there any additional matters that need to be dealt with in the service description in light of section 18 of the Act?

TUANZ considers that section 18 guides the Commission to act with the presumption that “competition” does benefit the long term interests of the end-users of telecommunications in New Zealand, with “efficiency” as a necessary, but secondary, consideration. Therefore if a proposed action of the Commission prima facie would promote competition, in order to forbear from such action on grounds of efficiency the Commission would need strong evidence of efficiency detriments that would outweigh the competition benefits.

TUANZ submits that the Commission’s exemption of mobile-to-mobile and 3G termination services from its proposed Recommendation are not based on any such strong evidence of efficiency detriments that would outweigh the competition benefits of including those services in the mobile termination service.

TUANZ proposes that the technology-neutral character of the mobile termination service is an important competitive dimension to the termination of voice calls across mobile networks of different technologies. This could be emphasized by a reference in the “additional matters” section of the service description in Schedule 1 (see proposed wording below).

(d) Should Telecom and Vodafone be excluded as access seekers?

TUANZ considers that there should be no special exclusions to the right to seek access. The termination service access right should apply to every interconnecting network, regardless of technology or market status.

(e) Is there anything the Commission can include in the wording of the service specification to assist providers of fixed-to-mobile services to achieve timely access to a regulated mobile termination rate applying to both mobile networks?

TUANZ suggests that simplification of the service specification by removing the exemption for 3G mobile from access provision, and for mobile origination from access seeking, will bring greater clarity to the Schedule. It may thus improve timely

provision of access by reducing the requirement for repeated case-by-case decision-making following section 43 application procedures.

Schedule 1, Part 2 Descriptive text:

In accordance with the comments made above, TUANZ offers the following suggestion for descriptive text:

Mobile Termination Service	
Description of Service	Termination (and its associated functions) of voice calls on a cellular mobile telephone network
Conditions	Nil
Access Provider	A person who operates a cellular mobile telephone network
Access Seeker	Any person who seeks access to the service
Access principles	The standard access principles set out in clause 5
Limits on access principles	The limits on access principles set out in clause 6
Initial Pricing Principle	Benchmarking against the price of terminating a voice call on a cellular mobile telephone network in comparable countries where the price calculation is based on a forward-looking cost-based pricing method
Final pricing principle	TSLIRIC
Requirement referred to in section 45 for final pricing principle	nil
Additional matters that must be considered regarding application of section 18	Open and competitive access to termination of voice calls on a cellular mobile network is independent of the technology of any particular terminating network, and of any other services that may be provided by that network.