



Comments of MCI

Regarding the

Australian Competition and Consumer Commission
Discussion Paper on
Mobile Services Review 2003

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TABLE OF CONTENTS

- I. Executive Summary and Introduction**
- II. Mobile Termination Rates in Australia Significantly Exceed Cost Estimates and are Above Benchmark Rates in Europe**
- III. Lack of Effective Competition for Mobile Termination**
 - A. The Calling Party Pays Principle
 - B. Market Definition
 - C. The Market for Mobile Termination is a Distinct One
 - D. All MNOs Have Market Power in Mobile Termination
- IV. Adverse Effects of High Mobile Termination Rates**
 - A. Adverse Impact on Long-Term Interest of End Users (LTIE)
 - B. Price Squeeze
 - 1. Vertical Integration
 - 2. Closed User Groups
 - C. Closed User Groups and On-Net Calls
- V. Need For Effective Regulation of Mobile Termination Rates**
 - A. How to Regulate—Basis and Nature of Price Controls
 - B. Cost Estimation Methodologies
 - 1. LRIC Bottom Up Model
 - 2. Ramsey Pricing
 - 3. The Efficient Component Pricing Rule (ECPR)
 - 4. Top-Down Cost Model
 - C. Network Externalities
 - D. Regulation of 3G
 - E. Implementation
- VI. Conclusion**

I. Executive Summary and Introduction

MCI WorldCom Australia Pty Ltd (MCI) welcomes the opportunity to submit comments in response to the Mobile Services Review Inquiry initiated by the Australian Competition and Consumer Commission (Commission).

With Australia's full liberalization in 1997, MCI entered the market deploying fiber optic networks in both Sydney and Melbourne and focusing on the provision of data, voice, and Internet services to business customers. The views we express in this submission are informed by our experience serving customers in Australia. In addition, these views are complemented by our comparative experience operating not only in the United States, but also in markets across Asia and in Europe, where we are one of the largest Pan-European competitive carriers.

As the Commission describes in the Mobile Services Review,¹ rates for terminating fixed traffic on mobile networks in Australia remain above the cost of terminating such calls. These above-cost rates result from the lack of competition for mobile termination services, as well as built-in incentives for mobile operators to seek high rates from fixed network customers, rather than their own customers. Above-cost mobile termination rates harm the long-term interest of end users by requiring end users of fixed networks to pay more than they should to call mobile phones, creating excessive profits for mobile operators. High mobile termination rates also may be used to subsidize end users of mobile networks, creating market distortions. In addition, above cost mobile termination rates often lead to price-squeeze whereby vertically integrated FNO-MNOs and MNOs offering fixed-to-mobile calls within Mobile Virtual Private Networks (MVPNs) price their retail services at levels that are close to, or even below the termination rates, thereby foreclosing entry in the market for fixed-to-mobile calls.

A number of regulators in Europe have witnessed these market dynamics and have taken steps to reduce excessive pricing by mobile network operators (MNOs). With the implementation of these reductions in Europe, Australia's mobile termination rates will be higher than benchmark rates in Europe. The ACCC should take note and also act swiftly to protect the long-term interests of end users by implementing cost-based price controls on mobile termination rates.

II. Mobile Termination Rates in Australia Significantly Exceed Cost Estimates and are Above Benchmark Rates in Europe

In its Mobile Services Review, the Commission states that, on a purchasing power parity basis, Australia's mobile termination rates (estimated to be around 24 Australian cents per minute) may not currently compare unfavorably with those in European jurisdictions. Based on MCI's experience around the world, we can confirm that mobile termination rates in Australia are not only well above cost estimates (as described below), even when considering purchasing power parity, but are also likely to be higher than most rates in Europe when planned rate cuts take effect over the next 6-18 months.

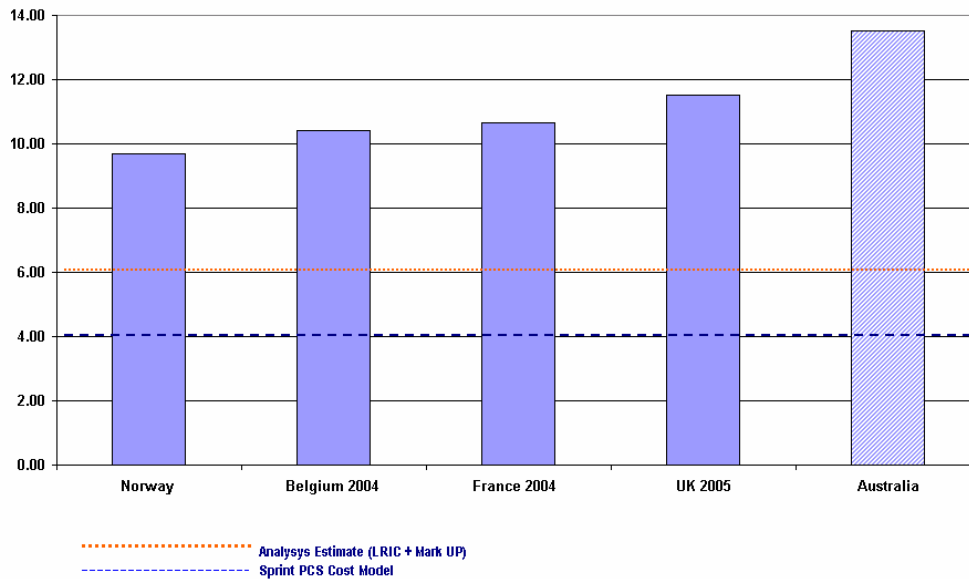
Indeed, NRAs in Belgium, France, Spain, Italy, and the United Kingdom have mandated rate reductions for mobile termination, further lowering mobile termination charges.² Australian

¹ *Mobile Services Review 2003*, a discussion paper of the Australian Competition and Consumer Commission (April 2003) [*hereinafter* Mobile Services Review], at 34.

² See ART de France: Décision n° 01-970 and 01-971, 16 November 2001, and generally, Ofstel, *Review of the Charge Control on Calls to Mobiles*, 26 September 2001, [*hereinafter* Ofstel Mobile Consultation].

Mobile Termination rates are almost twice as high as the mobile termination rates in Taiwan and Korea. The chart below is a comparison between selected European termination rates after mandated price-caps have been factored in and those currently prevailing in Australia. The chart demonstrates that in the absence of effective price controls Australian rates will soon start to compare unfavorably with those in Europe.

**Comparison of Current Australian Fixed to Mobile Termination Rates
And Current Best Practice and Other Countries Looking Forward Termination Rates
Weighted Average Peak and Off-Peak - EUR**



Furthermore, mobile termination rates in Australia are well above all reasonable estimates of cost. A wide range of indicators and analyses suggest that a competitive cost-oriented level for fixed-to-mobile termination should be around 6-12 Australian cents per minute. The table and chart below show a range of cost model estimates. The Sprint PCS estimates are Sprint PCS's own cost estimates. The other data are compiled by consultants (e.g., Analysys in the United Kingdom) or reflect rates in the marketplace. Excluding the Proximus estimate (which was based only on limited data and a number of proxy data sources), the cost model estimates range from 7.85 Australian cpm (Sprint PCS in New York) to 13.30 Australian cpm (Sprint PCS in Florida). By comparison, Australia's average fixed-to-mobile rate is approximately 24 Australian cpm.

Cost Estimates and Mobile Termination Proxy Indicators in Australian cpm			
	Eurocents pm Average	Peak	Off-Peak
Weighting		1.15	0.62
Belgium (Proximus) Estimate (^)	6.34		
US – Sprint estimate New York	7.85		
US – Sprint estimate California	10.08		
US – Sprint estimate Florida	13.30		
Spain – Average on-net mobile to mobile *	10.13	12.29	6.13
Belgium – Proximus on-net mobile to mobile *	10.87	12.61	7.67
UK – Analysys LRIC + EPMU **	11.92		
UK – average on-net mobile to mobile*	13.02	14.28	10.70
UK – MCI's MVPN with Vodafone	14.42	15.69	11.99
Australia – average fixed to mobile	24.00		

Table Notes:

[^] This was a simple estimate of Proximus' costs prepared by Telenet in Belgium using publicly available data in the context of the consultation by BIPT on mobile termination rates in 2001.

* Rate shown is half of the total mobile-to-mobile rate for comparison with termination.

** UK: Analysys model developed for OFTEL, 2001. All of the cost models listed below include common costs on an Equi-Proportionate Markup (EPMU) basis.

The average on-net rates indicated for Spain and the United Kingdom, for example, are rates actually charged by the MNOs and therefore are indicative of the MNOs' actual mobile termination costs. Other countries exhibit a similar pattern. It is also interesting to note that in mobile product markets where competition can and does exist, such as the provision of mobile services to closed-user-groups (CUGs) and mobile originated calls, the prices charged by the mobile operators are strikingly similar to the cost model estimates listed above.

For example, MCI utilizes a fixed-to-mobile VPN in the UK for use by its own internal staff in which it pays the mobile supplier 15.69 Australian cpm (peak) and 11.99 Australian cpm (off-peak) for termination. The average UK retail mobile-to-mobile prices for calling on the same network are 28.55 Australian cpm (peak) and 21.40 Australian cpm (off-peak). For the purposes of comparing with fixed-mobile termination, the mobile-to-mobile price proxies have been divided in two, yielding 14.28 Australian cpm (peak) and 10.70 Australian cpm (off-peak), since an on-net mobile-to-mobile call employs both origination and termination.³ Similarly, in Spain the average on-net mobile-to-mobile rate is 10.13 Australian cpm, whilst for Proximus it is 10.87 Australian cpm.⁴

³ These proxies are very conservative since there are no additional associated retail costs when providing mobile termination to other carries

⁴ MCI understands that there may be some cost differences between on-net mobile termination and off-net mobile termination, potentially involving somewhat higher costs for the latter compared with the former, but in our view these are not sufficient to affect the comparison significantly. Reasons why off-net termination may be more expensive than on-net termination could be less efficient routing if a greater number of smaller interconnects are used, the need for wholesale billing, carrier bad debt, transaction costs (with the interconnecting operator). Also, off-net termination often involves transiting the PTT, although fixed transit charges are generally small by comparison with mobile termination charges. Fixed to Mobile calls on mobile virtual private networks may be slightly more costly than mobile

These data demonstrate the rates that a mobile operator would be likely to charge if the market were genuinely competitive. It is noteworthy that the retail price data for on-net mobile-to-mobile charges, and the prices MCI pays over its internal fixed-mobile VPN described above, are close to the cost estimates derived from at least three different sources (Analysys, Telenet's estimate of Proximus' costs and Sprint PCS's estimates in the United States). This provides further evidence that the true cost of mobile termination is between 6 and 12 Australian cpm.

The foregoing provides clear evidence that rates are well above cost, thus disproving the MNOs' assertions that their rates are in line with cost. Not surprisingly, MNOs and their affiliated associations are the only who have insisted in different regulatory proceedings in Europe and in the United States that mobile termination rates are set at reasonable levels. Such claims strain credulity and are contrary to all of the available evidence, which indicates that the cost differences between fixed and mobile termination are in fact very small. The truth is that the mobile termination rates currently in effect in many countries far exceed any reasonable differential.⁵

III. Lack of Effective Competition for Mobile Termination

According to a report on cost oriented access and interconnection conducted by Andersen Management International A/S (Andersen), for the Sweden's National Regulatory Agency (NRA), in the absence of price controls under a Calling Party Pays (CPP) system, "there is virtually no competition and no immediate prospect of competition in the market for wholesale call termination" on mobile networks.⁶ MCI agrees. Moreover, without price controls, there is virtually no competitive pressure on MNOs to decrease mobile termination rates. Those mobile termination charges are passed on to FNOs and ultimately to consumers. There are minimal demand and supply side substitutes for mobile termination. Thus, termination on each MNO should be treated as a separate and distinct market. All MNOs, regardless of their market share in the retail market, should be subject to mobile termination rate regulation, and thus should be required to maintain GSM and CDMA termination access service as declared services.

A. The Calling Party Pays Principle

The CPP methodology, whereby the party initiating a call that terminates on a mobile phone pays for the call, is used in Australia, throughout the European Union, Latin America, the Caribbean and in numerous other Asian Pacific countries, including Japan. There are many advantages to a CPP system, including incentives for increased mobile penetration. One of the side effects of CPP, however, is the potential for above-cost mobile termination rates – if such rates are left unregulated⁷ – because there is no competitive pressure for MNOs to charge

termination as a result of smaller and therefore less cost-efficient interconnects. However, these real-world prices provide a useful basis for comparison and confirm the reasonableness of the proposed LRIC+EPMU rates.

⁵ For example, mobile termination rates in the United Kingdom are approximately 28 times the comparable fixed cost; in Sweden, Denmark, Italy, and France, the mobile termination rates range from 13 to 18 times the relevant fixed termination rate. In the United States, by comparison, a reciprocal compensation system prevails, whereby wireless networks generally terminate U.S. domestic landline calls for US\$0.02 to US\$0.04 cents a minute. See 47 C.F.R. Sections 20.11, 51.701 *et seq.*

⁶ Andersen Report, at 68.

⁷ Contrary to popular belief, the US also has a CPP system in that the originating network pays the MNO for termination, but such rates have always been regulated, which has prevented them from rising to excessive levels.

reasonable mobile termination charges as the cost of inbound calls is immaterial to the end-user customers. Those mobile termination charges are passed on to carriers and, ultimately, to Australian end users.

This phenomenon has been recognized in almost all countries in which CPP exists. Indeed, in the United Kingdom, Oftel, the U.K. regulator, found that the choice of a mobile handset and the price of outgoing services are the two most important factors when consumers choose a network, while the rates for calling mobile phones are not a factor at all for most consumers.⁸ Oftel also noted that termination charges are typically not listed in advertising material or published on MNOs' websites or in booklets, indicating further that operators do not compete on termination charges when trying to attract new customers.⁹ The U.K. Competition Commission, when reviewing Oftel's decision to impose price controls on mobile termination rates, noted that the mobile operators in a CPP system "are monopolists in relation to the supply of termination services on their own networks."¹⁰ The Competition Commission concluded, therefore, that "there are insufficient incentives for the [mobile operators] to reduce such charges and moreover that, in the absence of regulation, there would be incentives for [mobile operators] to increase them."¹¹ In sum, it is the dynamics of the CPP system that leads to the absence of competition in mobile termination services and has nothing to do with the market shares of the operator. This factor is particularly relevant in determining who should be regulated.

In sum, it is well established by regulators and competition authorities around the world that each of the mobile operators in countries with a CPP system has market power over termination of calls on their networks.

B. Market Definition

Several operators have argued, in a sweeping fashion and in proceedings around the world, that the "mobile sector" is vigorously competitive.¹² They fail to distinguish, however, between the *retail* market for mobile services, for which there may be several competitors, and the *wholesale* market for mobile termination, for which each mobile operator holds a monopoly. Mobile termination is not, as some of the mobile operators have implied, an amorphous part of the retail market for mobile services. What the mobile network operators offer in the bundle of *retail* services that they sell to subscribers is not "mobile termination" but, rather, the ability for subscribers to receive calls on their mobile handsets (*i.e.*, access to the mobile network).

⁸ See *Oftel Mobile Consultation*.

⁹ *Id.*

¹⁰ UK Competition Commission, *Mobile Phones Inquiry*, Remedies Statement, July 23, 2002 [*hereinafter* Mobile Phones Inquiry] (available at <http://www.competition-commission.org.uk/pressreleases/39-02REM.pdf>), at 4.

¹¹ *Id.*

¹² See Comments of Verizon, Inc., in *In the Matter of International Settlements Policy Reform*, U.S. FCC IB Docket No. 02-324, at 8; Comments of Asociación Nacional de Industrias Electrónicas y de Telecomunicaciones, or "ANIEL," at 6 (filed January 14, 2003) ("ANIEL Comments").

Mobile termination is something inherently different: it is a wholesale service offered to telecommunications operators as an input into their own retail products. A bundled product market can only exist when buyers purchase the products together and when there is a close functional correlation among these products. This is not the case for mobile termination because the buyers are at a different level of trade than those purchasing retail mobile services.¹³ Termination on each individual mobile network is a separate market because the calling party cannot choose which network on which to terminate calls. The market for mobile termination therefore should be defined at the individual network level, not as a market for mobile termination comprising all MNOs.

Notably, a number of regulators in Europe – including, for example, the UK, Sweden, and the Netherlands – have concluded that the relevant market definition for analyzing mobile termination charges should be the market for terminating to mobiles on individual networks. Moreover, the European Commission recently issued a Recommendation in which it identified a separate market for mobile termination on single networks for purposes of *ex ante* regulation.¹⁴

C. The Market for Mobile Termination is a Distinct One

Having established that market for the provision mobile termination must be defined independently and not in conjunction with other mobile services, the relevant question is what is the appropriate market definition. In this respect, there is little doubt that the market should be defined in terms of termination on each individual mobile network, as confirmed by a demand and supply substitutability analysis.

In order to assess the existence of demand side substitution, it is necessary to consider whether there is any substitute for termination on a given mobile network. All public network operators must be able to offer to retail customers the ability to reach any other user connected to the public network. To do so, voice telecommunications service providers must be able to purchase termination services from all the other network operators including MNOs. An operator wishing to allow its customers to call users of any particular network has no alternative but to purchase termination services from that network. The termination services of other networks cannot be considered a substitute.

Similar conclusions are reached in an analysis of supply side substitutability. In order to assess supply-side substitutability, it is appropriate to examine whether alternative suppliers are able to readily switch into the supply of mobile termination services in response to a small but significant price increase. MCI believes that there are no supply side substitutes for mobile termination services by a given mobile operator. It is impossible to substitute call termination on

¹³ There is little doubt that the only logical market definition is the one identifying a separate wholesale market for the provision of termination on individual mobile networks. First, there is no direct demand or supply substitutability at the wholesale level because calls to a given mobile user cannot be terminated on any other network but the one to which the mobile user has subscribed. Second, because of the calling party pays principle, there is no competitive pressure arising from the retail level. Rather, mobile users are completely insensitive to the rates for incoming calls as they do not bear that cost.

¹⁴ Commission Recommendation of 11/02/2003 on Relevant Product and Service Markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services; Annex I, paragraph 16 - Explanatory Memorandum, pages 32-34 (http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/documents/recomen.pdf; http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/documents/explanmemoen.pdf).

one network for termination on another network, because calls to a particular mobile user must be terminated on the network to which that user has subscribed.

This situation does not change even if we take into account substitutability at the retail level. A certain degree of substitutability may theoretically occur at the retail level if an MNO is able to convince subscribers on competing networks to switch to its network by lowering its rates for call termination. However, because of the CPP principle – as presented above – mobile subscribers are typically not sensitive to mobile termination rates and therefore unlikely to switch providers on such a basis.

D. All MNOs Have Market Power in Mobile Termination

Having established that each mobile network is a market as far as termination is concerned, it must be concluded that each mobile operator has market power on this market. This might not be the case if MNOs were constrained in setting termination rates by countervailing buying power by other operators. Given the above-described situation where termination rates are set far above any reasonable cost estimate, we believe it is safe to assume that MNOs are not subject to any competitive constraint when setting the level of termination rates. All MNOs, therefore, have market power over mobile termination services.

High termination charges on any mobile networks result in a substantial competitive distortions, leading to an artificial transfer of resources from fixed networks to mobile networks. In addition to increasing the cost of calling a mobile phone beyond economically efficient values, this results in an artificial diversion of economic resources from other sectors of the economy towards mobile networks. It makes little sense to accept market failures in the name of subsidizing some operators over others, particularly when FNOs and their consumers will suffer the consequences.

Additionally, permitting selective above-cost mobile termination may result in further competitive distortions. It also gives rise to inefficient forms of arbitrage such as “tromboning.”¹⁵ In sum, the potential disadvantages associated with regulating mobile termination rates of new entrants is far outweighed by the benefits of maintaining the more consistent and economically efficient approach of regulating all MNOs.

IV. Adverse Effects of High Mobile Termination Rates

A. Adverse Impact on Long-Term Interest of End Users (LTIE)

High mobile termination rates have a direct impact on fixed-line end users making calls to mobile phones because high termination rates lead to unnecessarily high fixed-to-mobile retail rates. This problem is exacerbated by the fact that mobile operators typically arbitrage their own excessive rates and in so doing, exclude FNO competitors from certain parts of the market. Moreover, the adverse effect on the long-term interest of these end users is

¹⁵ Tromboning is a form of arbitrage whereby FNOs route domestic traffic destined for mobile networks out of the country then back into the country to be terminated as an inbound international call, thereby paying lower international settlement rates rather than above-cost mobile termination rates. MNOs have attempted to prevent this form of arbitrage by blocking such calls or imposing mobile surcharges on international calls, demonstrating the lack of competition in the mobile termination market and the inherent market power over termination held by MNOs.

exacerbated as mobile phone penetration, particularly in business customer market segment, has increased dramatically in Australia.

In addition, unnecessarily high mobile termination rates depress demand for fixed to mobile calls. Consumers make fewer fixed-to-mobile calls and talk for shorter periods when they do make fixed-to-mobile calls. Such economic inefficiency reduces the utility of mobile phones by discouraging consumers from taking advantage of the opportunity to reach mobile phone subscribers wherever they are located. Bringing fixed-to-mobile termination rates in line with cost would unlock natural demand for fixed-to-mobile calls and fully maximize the utility of mobile networks. However, due to the low price elasticity of demand for fixed-to-mobile calls (itself partly the result of the lack of effective substitutes), the effect referred to above is insufficient to persuade the MNOs to reduce their termination charge to stimulate demand.

Moreover, the impact of above-cost mobile termination rates has intensified as mobile penetration has increased over the past several years, a trend that will continue. Global mobile subscribership grew at a compound annual growth rate of 51.3 percent between 1995 and 2000.¹⁶ In the EU alone, where mobile termination rates are the most excessive, as the European Commission indicated in the Mobile Services Review, the average mobile penetration rate has grown from 18 percent in 1998 to 75 percent in 2002.¹⁷ This is also the case for Australia where mobile market reached 64% penetration at the beginning of 2002.¹⁸

B. Potential for Price Squeeze

1. Vertical Integration

High mobile termination rates are also likely to give rise to serious competitive distortions. A clear example of such a distortion occurs where, as a result of high fixed-to-mobile termination rates, integrated mobile-fixed operators are able to place FNOs in price squeeze, thereby limiting competition. In brief, it is well recognized by regulators that an entity that is both a supplier and competitor in a market has an incentive to disadvantage its rivals by discriminating in the pricing or provisioning of inputs. An especially harmful form of exclusionary behavior where a firm with market power raises above cost the price of the inputs charged to competitors, while at the same time enjoying lower costs for its own use of the same input. In the case of mobile termination, competitive FNOs may be disadvantaged relative to Telstra and other integrated mobile-fixed operators in the provision of fixed services if such operators set mobile termination rates above cost.

Even if Telstra Mobile and other integrated operators may appear to be observing non-discrimination obligations by charging Telstra Mobile's fixed line operations the same above-cost termination rate (and this is by no means clear in the case of bundled services offered to customers), there is a substantial difference in the situation faced by Telstra and its competitors. Payments from rivals like MCI to Telstra Mobile are part of MCI's marginal cost of providing fixed-line services. Payments from Telstra to Telstra Mobile are internal transfer payments within the same undertaking. Since integrated mobile-fixed operators like Telstra will attempt to maximize overall profits of the undertaking (rather than the profits of each unit identified

¹⁶ *Telegeography 2002*, at 78.

¹⁷ See *8th Implementation Report*, Annex 1, Chart 42.

¹⁸ *Mobile Services Review*, at 14.

separately), it is unlikely to treat the internal transfer payment as a true cost in competing in the fixed-line market.

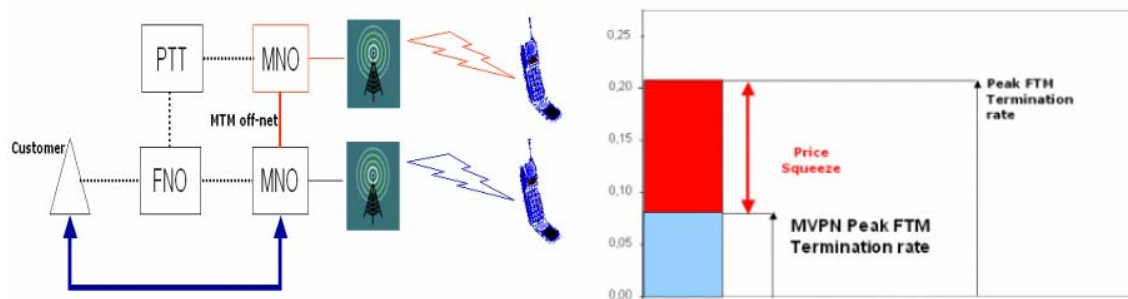
These circumstances enable Telstra and other MNOs to place FNO competitors like MCI in a price squeeze, which occurs when Telstra's retail price for fixed-line services fails to cover the same costs as an equally efficient competitor would have to cover if it provided the identical service. The result is to limit competition by foreclosing entry by FNOs and deterring their ability to invest in their networks.

The data required to demonstrate this form of price-squeeze is difficult to obtain because price-squeeze often occurs in the most keenly contested markets, for example the high-end corporate sector, where bespoke discounts are common and prices are frequently opaque as a result of bundling. For this reason the only means of reliably limiting the scope for price squeeze by vertically integrated FNO-MNOs and the resulting harm to competition, is to ensure that interconnect rates are cost oriented.

2. Closed User Groups and On-Net Calls

MNOs can also implement price-squeeze and protect themselves against competition from FNOs by offering business customers Mobile Virtual Private Networks (MVPNs). In MVPNs, fixed-to-mobile calls from office telephones to mobile subscribers within the MVPN are routed directly via a link between the customer's PBX to the mobile network as illustrated in the figure below.

Mobile Virtual Private Networks (MVPNs)



In routing the calls this way, the cost of termination is avoided, and the prices for fixed-to-mobile calls are typically a small fraction of the cost of fixed-to-mobile termination even though the cost-base is similar. Fixed operators are therefore unable to compete with mobile operators offering MVPNs as they are priced out of the market as a direct result of the MNO's dominance in termination on its own network. This phenomenon has the effect of limiting the number of competitors in the marketplace, and therefore limiting the long-term benefits of competition in terms of efficiency, price, innovation and quality.

In short, high mobile termination rates create harmful competitive incentives for MNOs to behave anti-competitively. The higher the differential between rates and cost, the greater distortion in rates, but also could force new entrant FNOs out of the market.

It is in the nature of MVPN offers that prices are highly bespoke to individual customers and are therefore difficult to obtain.

V. Need For Effective Regulation of Mobile Termination Rates

The lack of competitive pressure on mobile call termination rates in the CPP environment allows MNOs to raise these rates well above cost, with resulting negative competitive effects in the Australian mobile market. It was for this reason that the Commission concluded in 1997 that the forbearance approach to setting appropriate pricing did not meet the legislative criteria, “given the level of competition in the mobile services market, particularly in its termination element.”¹⁹

The Commission also recognized that a cost-based methodology for setting termination rates would be key to “limiting opportunities for anti-competitive behavior by integrated carriers.”²⁰ Although the Commission chose, as part of the 1997 GSM declaration proceeding, to demur in applying a cost-based approach due to potential implementation costs, it recognized the potential dangers of failing to do so.

In addition, the Commission has indicated a general belief that its current approach of retail benchmarking on termination pricing has not met expectations, finding that “the rate of decline in mobile telephony prices has slowed down in recent years.”²¹

Accordingly, MCI believes that price controls on mobile termination rates are not only appropriate in a CPP environment, but also necessary to foster growth. MCI does not believe that competitive forces will emerge in the short term. Regulatory action is required. The only alternative to avoid the above-described anticompetitive effects on consumers, FNOs and the overall market, is to regulate each MNO. Regulation imposed on one MNO would not resolve the problem and would have the reverse effect – by discriminating among players enjoying similar market power – introducing an additional element of discrimination.

A. How to Regulate – Basis and Nature of Price Controls

Several costing principles have been suggested for example: Fully Distributed Costs and Average Stand Alone Costs (FDC), the Efficient Component Pricing Rule (ECPR), Ramsey Pricing, and Long Run Incremental Costs plus equi-proportionate markup (LRIC + EPMU) among others. However, as demonstrated by Andersen and other economic studies and discussed in the following section, FDC, ECPR, and Ramsey Pricing present several limitations that generate other distortions in the market. For this reason, MCI supports using LRIC + EPMU using a bottom-up cost model to determine the access and interconnection rates in Australia.

¹⁹ Mobile Services Review, at 32.

²⁰ *Id.* at 32.

²¹ *Id.*

B. Cost Estimation Methodologies

1. LRIC Bottom-Up Model

MCI submits that a bottom-up LRIC model should be used as the leading model to determine the access and interconnection rates in Australia. Some of the advantages of a bottom-up model include the following:

- It can be achieved without substantial input from the MNOs. In particular, it does not require detailed accounting data to be available.
- It reduces the problem of confidentiality of data. As the model does not model the operator's actual network, the cost and volume inputs can be generically obtained by using generally available information and knowledge about telecommunications network structures.
- It increases the transparency and objectivity of the cost-calculations. Input data, assumptions and calculations can be scrutinized by both the regulatory authority and perhaps by other operators as well. This may increase other operator's confidence in the model.
- It is easier to build and operate than a top-down model and may be operated without ongoing assistance from the regulated operator. The effect of different assumptions can be quantified and adjustment to data, assumptions and calculations may be made over time.
- It takes account of all theoretically available efficiencies, both technical and operational. This makes it possible to build a network that is optimally dimensioned to the current demand and that uses forward-looking technology.

The Commission should consider establishing an industry group to participate in the development of a bottom-up cost model so that the industry can have confidence in the output. As all network operators, including those whose costs are being modeled, would have the ability to participate in the development of the bottom-up model by providing input data and discussing assumptions and calculations, there is no reason to expect that the output rates will be inaccurate. If the MNOs nevertheless believe that the data contained in the bottom-up LRIC model is wrong, they should be given an opportunity to prove their case with supporting data. This is the approach that was adopted by a number of regulatory authorities, for example OPTA, for fixed and mobile interconnection.

2. Ramsey Pricing

Some MNOs have argued that even if they are found to have market power for termination of calls on mobiles, the higher charges for mobile termination are competed away through lower prices in the retail origination market. MNOs argue that they are therefore setting economically efficient "Ramsey Prices." This argument fails. First, even if we were to accept the arguments that Ramsey Pricing is appropriate (which we do not), any purported benefits of Ramsey Pricing would depend on the retail side of the market being fully competitive. Otherwise, the above-cost component of mobile termination charges would not be competed

away in the other markets.²² Ramsey pricing requires that the profit constraint (*i.e.*, zero excess profits) be met and not exceeded.²³ In fact, the evidence gathered by different Financial Analysts indicates that the MNOs are earning supra-normal profits.²⁴

Second, even if the mobile sector were competitive, the subsidy provided from above-cost mobile terminations to retail services would be economically inefficient. With respect to consumers, it is a key element of the cross-subsidization and Ramsey Pricing arguments of the MNOs that high termination rates do not hurt consumers, because they are balanced by lower rates for other services. Such benefits, however, obviously do not flow to consumers who use only or predominantly fixed lines. Likewise, high mobile termination rates increase the costs of FNOs, which leads to higher retail prices and lower returns on investment as a result of price squeeze. This, in turn, could lead FNOs to reduce their future investments in new and expanded services and facilities. Consequently, MNOs' cross-subsidization arguments are unsustainable because "the loss of economic welfare suffered by those calling mobiles would exceed the gain to mobile owners."²⁵

Third, a socially optimal application of Ramsey pricing requires that prices be set based upon market elasticities of demand for the services used by consumers, something that is economically infeasible. By contrast, MNOs price using the elasticity of demand for mobile termination, which is much lower than the retail elasticity of demand for calls to mobiles. This is because an MNO in the CPP environment does not directly realize any benefits from reduction in the costs of incoming calls.

3. The Efficient Component Pricing Rule (ECPR)

The concept at the root of ECPR, also referred as the *Baumol-Willig* rule, is to add an opportunity cost mark-up to the cost of providing the access and interconnection services. Some MNO have proposed ECPR as the cost method to estimate fixed-to-mobile termination rates. However, ECPR would lead to persistently super-normal rents on a service in which there is no prospect of competition.

For example, the U.S. Federal Communication Commission's "Report and Order" (FCC 96-325) of August 1996, to implement the local competition provisions of the Telecommunications Act of 1996 (unbundling requirements and interconnection pricing, dialing parity, network disclosure and numbering administration) argues that ECPR (which is used for resale) is an improper method to set the prices for interconnection and network elements, because the methodology is not cost based and provides no mechanism for forcing retail rates to competitive levels. Similarly, the "The Tragic Inefficiency of the M-ECPR" report, developed by Nicolas Economides, concluded that pricing rules that are based on private opportunity costs would perpetuate pricing inefficiencies and result in a lower social surplus than pricing, which is based on social opportunity rather than private opportunity costs.

²² Oftel dismissed these arguments on the same grounds. See Oftel Mobile Consultation, at 22-25.

²³ See Cave Paper, Section II.

²⁴ See JPMorgan, *Mobile Matters 2002 - Is there an ARPU rebound?*, London, September 2002; Salomon Smith Barney, *European Mobile*, 10 September 2002.

²⁵ Andersen Report, at 70.

4. Top-Down Cost Model

One of the major problems presented by a top-down cost model approach is that the carrier is responsible for developing it. Historically, the top-down model was embraced by incumbent carriers with a guaranteed rate of return on their “costs of doing business” at a time when they were the only provider of facilities and these facilities were not used also as inputs by competitors. Therefore, the top-down model itself is defined as loading the total costs of the business into the model to produce a rate that fully recovers all costs of the business, not just costs that are explicitly associated with the mobile termination network.

Consequently, MNOs will be in complete control of the development of the model, including selection of which data to use, and defining assumptions and simulations and the resulting price. It is unlikely that MNOs will have the necessary incentive to develop an efficient top-down model that could lead to a reduction in its revenues. Moreover, the MNOs’ incentive to delay the model’s development, and to use misleading data, is likely to diminish competitors’ confidence in the output of the top-down cost model.

C. Network Externalities

Some MNOs have argued that network externalities should be included as a mark-up to LRIC models for mobile termination. MCI submits that network externalities should not be included in any price controls established for mobile termination. The efficiency gains theoretically obtained by including network externalities are outweighed by the significant disadvantages. Among other things, a network externality subsidy would deviate from the basic principle of cost orientation. Moreover, network externality benefits are achieved only when a new customer, *i.e.*, one who did not already own a mobile phone, subscribes to a mobile network. Similarly, many new mobile phone customers would subscribe even without the network externality subsidy. Therefore, a network externality subsidy is likely to encourage only a small number of additional subscribers to mobile networks than would otherwise join the network.

In addition, inclusion of a network externalities mark-up would be discriminatory to fixed operators because fixed operators are not allowed to add such a mark-up even though network externalities would work in both directions. All things being equal, a customer choosing between a fixed line and a mobile phone would choose the subsidized mobile phone over the non-subsidized fixed line. Finally, where call termination charges are already above cost, as they are currently, there is no justification for including network externalities because MNOs already have an incentive to subsidize their services to increase network use. For all of these reasons, ACCC should not include a mark up for network externalities in any cost model developed for mobile termination.

D. Regulation of 3G

It would appear premature to regulate mobile termination on 3G networks, particularly in view of the nascent introduction of 3G networks into the Australian market. However, MCI submits that the Commission should monitor the development of the 3G market and should be prepared to act swiftly to impose price controls if 3G termination costs display the same non-competitive behavior, leading to market distortions, as currently exists for 2G termination costs. There is no reason to expect that the future market for terminating calls on 3G will be any more competitive than the current level for 2G networks.

In addition, MNOs should bear the risk of their investments in 3G services and should not be permitted to raise 2G call termination rates in order to fund their investments and drive users onto 3G networks.

E. Implementation

MCI submits that to prevent the distorting effects of excessive mobile termination costs being perpetuated, rates should be reduced to LRIC+EPMU as soon as possible. Once it is established that mobile termination rates are above cost, there is no justification for deviating from the basic principle of cost-orientation for any period of time. So long as such rates are above cost, the inefficiencies and distortions associated with such high mobile termination rates will persist there is no reason that fixed line customers and FNOs should subsidize MNOs and their customers for any transition period.

If for any reason an immediate reduction to LRIC+EPMU is deemed infeasible, a glide-path may be used. However, if this is the chosen method of implementation, it is essential to introduce measures to protect the market from the anti-competitive effects of price squeeze. To achieve this, it is necessary to implement a non-discrimination condition whereby vertically integrated FNO-MNOs and MNOs providing fixed-to-mobile services within MVPNs must impute the same cost to their own business as they do to their competitors. In addition, there must be a requirement to satisfy a price-squeeze test whereby the retail price should cover the cost of interconnection plus an adequate margin to cover the cost of retail operations.

VI. Conclusion

Despite the many advantages to a CPP system, it is well established by regulators and competition authorities around the world that each of the mobile operators in countries with a CPP system has market power over termination of calls on their networks. It was for this reason that the Commission concluded in 1997 that the forbearance approach to setting appropriate pricing did not meet the legislative criteria, given the level of competition in the mobile services market, particularly in its termination element. Subsequently, the Commission has indicated a general belief in the Mobile Services Review that its current approach of retail benchmarking on termination pricing has not met expectations, finding that the rate of decline in mobile telephony prices has slowed down in recent years.

Above-cost fixed-to-mobile termination rates have several adverse effects on consumers and other operators in the market. But most important, consumers making calls to mobile phones pay far more for those calls than they would in a truly competitive market. This has enormous economic impact, harming end-users and distorting the allocation of investment funds between different sectors of the economy. The data we have shown demonstrate the rates that a mobile operator would be likely to charge if the market were genuinely competitive. High mobile termination rates have a direct impact on fixed-line customers making calls to mobile phones because high termination rates lead to unnecessarily high fixed-to-mobile retail rates. Moreover, as MNOs are able to extract super-normal profits for mobile termination, vertically integrated MNOs have the opportunity to use those super-normal profits to execute a price squeeze against their fixed-line competitors for other services. The adverse effects on the long-term interest of all Australian end users is exacerbated as mobile phone penetration, particularly in business customer market segment, has increased dramatically in Australia.

The incentive and ability of MNOs to act anti-competitively would be significantly reduced, if not eliminated, with the continued declaration of mobile termination access services (GSM and CDMA) and implementation of cost-based price controls on the mobile termination rates. For the reasons provided above, the Commission should continue its declaration of GSM and CDMA services in order to promote a competitive market in the provision of fixed-to-mobile calling. The declaration should be varied, however, by replacing retail benchmarking with a bottom up LRIC cost-based methodology for determining appropriate termination rates.