



**CABLE & WIRELESS  
OPTUS**

**Cable & Wireless Optus submission**

**to the Australian Competition and Consumer  
Commission's Draft Report**

**Pricing methodology for the GSM termination service**

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## Introduction — overview

This paper is written in response to the Australian Competition and Consumer Commission's (the Commission), "Pricing Methodology for the GSM Termination Service" draft report (draft report). It provides a:

- Critique of the Commission's analysis;
- Response to the Commission's proposed pricing methodology; and
- A suggested way forward.

Cable & Wireless Optus believes the Commission's proposed pricing methodology for GSM services has some reasonable properties. In particular, the methodology is less heavy-handed than the 'cost-based' approach proposed in the United Kingdom. To the extent that current mobile prices reflect a Ramsey efficient pattern of recovery of mobile operators fixed and common costs, the Commission's approach will allow some preservation of this efficient pattern of cost recovery. In addition, mobile operators will have limited commercial freedom to partially determine their mobile termination charges, as dictated by changes in prices for the total package of mobile services.

Nevertheless, we believe the Commission has not satisfied the burden of proof in terms of justifying price intervention in the mobiles market.

The Commission's basis for mobile price regulation is: consumers are ignorant of GSM termination rates in a way that causes market failure, and mobile termination is a bottleneck. The Commission argues that these two factors mean mobile operators have a degree of market power and are able to keep mobile termination rates above competitive levels. The Commission, therefore, concludes that it is necessary to price regulate mobile termination rates.

Cable and Wireless Optus's overall position, in contrast to the Commission's views and pricing approach, is that:

- Consumers are not ignorant of termination rates in a manner that causes market failure;
- Mobile termination is not a bottleneck as there are a myriad of substitutes to fixed to mobile (FTM) calling;
- There is no evidence to suggest mobile operators are pricing above cost (indeed current earnings are below mobile operator's cost of capital) and therefore the Commission's rejection of the forbearance option is not justified; and
- The Commission has not demonstrated any consumer gains from its proposed pricing approach versus forbearance. Demonstration of such welfare gains is a necessary condition for regulatory intervention that usurps current commercial

market prices, and the making of a Part XIC determination that promotes the long-term interests of end-users (LTIE).

The Commission's assumption that consumers are ignorant of mobile termination rates is one of the fundamental building blocks of its analysis. The consumer ignorance assumption says that consumers are ignorant of termination rates, and that this upsets the operation of price signals to consumers on mobile termination rates and therefore 'shields' these rates from normal competitive pressures. Indeed, the Commission's consultants concluded that such consumer ignorance would lead to the perverse theoretical outcome that prices increased as competition intensified. The problem with relying on the consumer ignorance approach assumption is that the Commission does not demonstrate that consumers are ignorant (it merely asserts it). The assumption that consumers are ignorant in a manner that causes market failure is totally at odds with the empirical market data and survey evidence. The conclusion of this theory, that mobile termination rates will increase with decreases in industry concentration, is disproved by the empirical evidence of *declining* termination rates.

The Commission also says that terminating access is a bottleneck. The problem with this assumption is that it ignores the evidence. There are a significant number of substitutes for fixed to mobile calls. We address each of these substitutes in detail in the body of this paper. However, it is worth noting here that one of these alternative paths — SMS to mobiles from mobiles — has absolutely taken off since the Commission released its draft set of principles. For example, Optus Mobile customers sent 13 million messages per week in January 2001, compared with 6 million messages in July 2000. Recent reports in the *Weekend Australian* indicate that Telstra and Vodafone have also experienced significant similar growth in SMS messaging.<sup>1</sup>

In discussing possible approaches to regulating mobile termination rates, the Commission says that it does not believe that it should adopt the forbearance option (i.e. leaving it to the market). The Commission rejects the forbearance option because it believes there is evidence that prices charged by mobile operators are not being constrained by competition. Yet the Commission fails to cite any of the evidence that is the basis for its rejection of the forbearance option. As we have pointed out to the Commission on a number of occasions, if there were excess profits in the system, mobile operators would be earning above their cost of capital. However, mobile operators are not earning anywhere near their cost of capital. This indicates highly competitive pricing in the mobile sector.

The Commission has not demonstrated any consumer welfare gain from its proposed approach to pricing GSM termination rates. This is in contrast to what the Commission has been able to demonstrate in its assessment of Telstra's PSTN undertaking. The Commission was able to say that their decision would provide over \$250 million per annum in consumer welfare benefits. We believe that, given the Commission must

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<sup>1</sup> The Weekend Australian, 3 February 2001

regulate in the long term interests of end users, it should demonstrate that there is a consumer gain from its proposed regulation versus forbearance. The Commission should demonstrate how its proposed pricing would differ from the current Ramsey efficient pricing structure, and how consumers would benefit from this departure from forbearance.

We make the following points in response to the Commission's proposed methodology.

- Linking wholesale rates to retail rates will introduce distortions into the mobiles market;
- Operators may shift the focus of competition from price to non-price factors;
- The starting price for the weighted average retail basket should be a weighted average, not the lowest observed price, as suggested by the Commission;
- The Commission will need to develop a mobile subscription quality index to disaggregate real changes in prices from changes in quality;
- There are very real issues involved with properly measuring the weighted average retail basket in a way that minimises market distortions;
- The basket cannot include all retail activity;
- The methodology proposed by the Commission will be quite difficult to practically implement. Therefore, if the Commission is not minded to forbear, it should immediately establish an ACIF Working Committee, or some similar inter-carrier regulatory forum, to assist in the expeditious and accurate implementation of the Commission's proposed methodology;
- The basket should be applied consistently — its makeup should not constantly change;
- The basket should not include 'on net' pricing; and
- Any glide path should be forward looking, and should not be backdated.

If the Commission is concerned about the distortionary impact of its proposal, but is not minded to forbear from price regulation, Cable & Wireless Optus would suggest an alternative approach — a non-discrimination rule between the commercially negotiated rates between mobile operators and the rates offered fixed networks. Resellers of the fixed to mobile call case would be offered a weighted average of the carriers rates for mobile termination negotiated with other mobile carriers. In this way, FTM resellers would be provided with fair and non-discriminatory interconnection charges. The methodology would be relatively uncomplicated for the Commission to implement.

This paper is structured as follows.

- Chapter 1 provides an overview of our response to the Commission's paper;
- Chapter 2 provides our response to the Commission's arguments on consumer ignorance;
- Chapter 3 provides our outline refuting the Commission's argument that termination is

a bottleneck and demonstrates all the substitutes to termination services;

- Chapter 4 provides our arguments on why we believe that the Commission's arguments on forbearance are not correct;
- Chapter 5 provides a outline of why we believe that the Commission has not demonstrated that their approach will enhance consumer welfare;
- Chapter 6 provides an outline of the factors we believe the Commission should take into account if it adopts its proposed approach to regulating mobile termination rates; and
- Chapter 7 provides the Commission with an alternative method of regulating prices which would be less distortionary than the current proposed approach.

## 1. Overall response

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- 1.1 Cable & Wireless Optus believes the Commission's GSM pricing methodology, that mobile termination charges change in accordance with changes in total package charges, has certain desirable properties. These desirable properties include an, at least partial, future preservation of Ramsey efficient mobile pricing structures<sup>2</sup>, and would allow mobile operators some commercial freedom to determine their mobile termination charges.
- 1.2 Nevertheless, the Commission's approach to regulating mobile termination does not have a reasonable basis. Our position is that the justification for the Commission's pricing approach has not been adequately demonstrated because:
- (a) the Commission's assertion that there is consumer ignorance, and its conclusions about its effect, is not supported by the empirical evidence;
  - (b) the Commission's argument that mobile termination is a bottleneck is not correct as there are a myriad of substitutes for mobile termination;
  - (c) there is no evidence to suggest that mobile operators are pricing above cost and in fact current earnings are below operators' cost of capital; and
  - (d) the Commission has not demonstrated any consumer gain from its proposed pricing and should not implement its proposed pricing approach unless it can demonstrate it advances consumer welfare versus forbearance.

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<sup>2</sup> Cable and Wireless Optus does not believe the methodology allows for fully Ramsey efficient pricing to be maintained through time, because operators will not have full opportunities to respond to changes in relative costs of outputs, revisions of information on elasticity estimates, and changes in demand elasticities through time.

## 2. Problems with consumer ignorance assumptions

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- 2.1 This section addresses our concerns with the Commission's arguments on customer ignorance. It first outlines the importance of the concept of customer ignorance to the theory the Commission uses to support mobile regulation. It then provides our critique of the Commission's arguments which are:
- (a) the predicted outcomes of the King and Gans model on which the Commission relies are not supported by what happens in the market;
  - (b) the Commission and its consultants merely assert that there is consumer ignorance causing a market failure, but they do not cite or adduce any empirical evidence showing such ignorance exists;
  - (c) there are significant amounts of empirical evidence (from sources such as Oftel) that indicates that consumer ignorance does not exist, and that consumers are sufficiently well-informed to cause highly competitive results;
  - (d) it only takes a very small percentage of customers to be informed of terminating rates to drive large overall changes in pricing to the competitive result; and
  - (e) the Commission has under estimated the impact of closed user groups (which are dramatically growing in importance) on mobile prices.

### *Overview of Commission's consumer ignorance argument*

- 2.2 One of the justifications the Commission cites for regulating mobile termination is that consumers are ignorant of the terminating rates on mobile networks in cases where a fixed line customer calls a mobile network. According to this assumption, the existence of this consumer ignorance bestows on mobile operators market power, which can be used to undermine competition. Quoting from the Commission's paper, it says:

*"The Commission's economic consultants proposed that mobile carriers may have a degree of market power because:*

- *once an end-user is connected to a mobile network, the mobile carrier has control over access to GSM termination for that end-user; and*
- *consumer ignorance allows the mobile carrier to increase access prices for the GSM termination service without feeling the full effect of the increase. This is because an end-user calling can do no better than*



*basing his/her calling decisions on estimates of the average access price for GSM termination.*

*The Commission accepts that control over access to the end-user and consumer ignorance may enable mobile carriers to sustain high access prices for GSM termination.”<sup>3</sup>*

- 2.3 It is worth expanding on the second bullet point in the Commission’s quote above. The Commission’s consultants concluded, further, from this line of argument that smaller operators and newer operators would be more able to increase termination rates than incumbents. This is because customers would be less likely, according to King and Gans, to ‘feel the full effect of the increase’.
- 2.4 This somewhat paradoxical outcome of increasing competition leading to increasing prices arises for the following reason. The only thing a customer calling from a fixed line to a mobile network knows is the *average* price of terminating calls on *all* the mobile networks. This means that smaller networks are able to put up their terminating charges by a large amount, without impacting on the *average* charge by the same proportion as the particular carrier’s rate increase. In other words, it is argued, carriers will be able to increase termination rates ‘under the cover of darkness’ of consumer ignorance or, more particularly, consumer’s imperfect knowledge of individual termination rates. This sets up a dynamic where prices spiral upwards as competition intensifies with new entry.
- 2.5 In short, customer ignorance prevents pricing signals operating in a manner that constrains price increases. This allows profit maximising firms to surreptitiously increase their termination rates.

#### ***Model’s conclusions not supported by empirical evidence***

- 2.6 The major and most obvious flaw in the Commission’s model, which is used to justify regulating termination, is that its theoretical predictions of increasing termination rates are simply not supported by empirical data. For instance:
- (a) Actual mobile termination prices have fallen over 30 per cent since 1996. This means either that Gans and King’s model is not correct or the “consumer ignorance” assumption is incorrect.
  - (b) As the mobile market has become less concentrated, mobile termination prices have decreased. <sup>4</sup> For example, a 33 per cent decrease in industry concentration as measured by the Herfindahl

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<sup>3</sup> Pg 5 of ACCC draft principles.

<sup>4</sup> For example, market shares at the start of 1996 were Telstra 65 per cent, Cable & Wireless Optus 30 per cent and Vodafone 5 per cent (Herfindahl index = .53). Market shares today are Telstra 46 per cent, Cable & Wireless Optus 33 per cent, Vodafone 19 per cent, One.Tel 1 per cent, Hutchison 1 per cent (Herfindahl index = .36). Mobile prices have decreased 30 per cent over the period.

index over the 1996-2000 period has produced a 30 per cent decrease in mobile termination prices. If the King and Gans assumption on customer ignorance was correct, these termination rates should have been accelerating to infinity as mobile industry de-concentration has occurred.

- 2.7 In the face of empirical evidence that very substantially calls into question the usefulness of the Commission's consultant's assumption on consumer ignorance, Cable and Wireless Optus does not believe it is reasonable for the Commission to simply "adopt" this assumption as an assertion of fact, "of what is", without empirically testing the reasonableness of the hypothesis.

***Commission and its consultants assert that there is consumer ignorance***

- 2.8 Another problem with the approach used by the Commission's consultants, and asserted by the Commission, is there is no citation or adducing of any empirical evidence to support the modeling assumption that consumers are ignorant. King and Gans simply deploy their assumption for the purpose of deriving 'market failure'.
- 2.9 Given the importance of this assumption to the model which is used to support regulation, we do not believe that it is appropriate for the Commission to adopt this modeling assumption as a 'finding of fact'. The Commission should test the empirical veracity or otherwise of King and Gans assumption.

***Empirical data does not support the Commission's assertion.***

- 2.10 Further, the available empirical evidence does not support the conclusion that consumers are ignorant of termination rates in a manner that causes market failure. Indeed, research by Oftel conducted in August 2000 for a report entitled *Consumers use of mobile phones* demonstrates that consumers are very aware of such prices, and a plethora of substitution in fact exists from multiple sources, any one of which singularly is sufficient to cause a competitive result. The Oftel report finds that<sup>5</sup>:
- (a) 51 per cent of customers of fixed line customers indicate they keep the length of a FTM call shorter than a FTF call, due to the higher per minute cost of FTM calls;
  - (b) Only 15 per cent of FTM callers said the cost of calling a mobile does not really matter to them;
  - (c) 70 per cent of mobile consumers say they, at least sometimes, substitute MTM calling for FTM calling in certain situations where it is cheaper — such as usage of monthly free minutes, or "intra mobile network" cheap calls, or at off peak times;

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<sup>5</sup> See figure 5f.

- (d) 78 per cent of mobile subscribers said they were satisfied with the range and quality of advice and information available to assist them choose a mobile network and package that best suited their needs;
- (e) 27 per cent of FTM callers know the approximate price of making FTM calls;
- (f) 18 per cent of mobile subscribers considered what mobile network they would most frequently be calling before making their mobile purchase decision;
- (g) 15 per cent of customers find out how much it would cost people to call them (before making the mobile purchase decision);
- (h) 8 per cent of customers indicated that the cost of others calling them was a significant factor in their choice of mobile network; and
- (i) 4 per cent of customers pay some or all of the bill for people who call their mobile (closed user group).

***It only takes a small percentage of consumer substitution to cause an economically efficient and competitive outcome***

- 2.11 As has been demonstrated to the Commission by expert economic testimony, it is not necessary for all consumers or a particularly large proportion of consumers to be aware of what termination rates are for sufficient substitution to exist to affect pricing to the economically efficient result. Indeed, it is only necessary for a small percentage of customers to be informed to create a sufficient economic substitution so that prices decrease for *all* consumers to competitive levels.
- 2.12 This is particularly the case in the mobile market. The affidavit of Dr Hausman, which we previously provided to the Commission, indicates that given a ratio of marginal to fixed costs of 0.2, only 5.9 per cent of callers (or those being called) needed to be informed to create sufficient economic substitution to cause a competitive result<sup>6</sup>:

*“Suppose (contrary to fact) that only the calling party receives value from the call so that mobile subscription levels are not affected by a price increase above competitive levels. Given the high fixed costs of mobile networks, I will assume that the marginal cost of a fixed to mobile call is 0.2 of the competitive price.<sup>7</sup> If an attempted price increase of 5% above the competitive price were attempted, only 5.9% of potential calls would need to not occur to*

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<sup>6</sup> Affidavit of Dr Hausman to the ACCC at point 19.

<sup>7</sup> I am combining both peak and off-peak calls here. The exact percentage will not greatly affect the results here.

*make the attempted price increase unprofitable.<sup>8</sup> This calculation demonstrates that only a relatively low proportion of consumers need to be informed to cause prices to be competitive.”*

2.13 The Oftel evidence cited above demonstrates that significantly more than 5.9 per cent of callers and those being called are informed about relevant mobile pricing. Remember there is both economic substitution at the A party (caller) and B party (receiver) end, and that substitution by only 5.9 per cent of either group would be sufficient to cause a competitive result. The Oftel evidence shows that multiples of the requisite percentage do, in fact, substitute. For instance:

- 8 per cent of people said that the cost of other people calling them on their mobile phones was a significant factor in influencing their choice of mobile network. This figure is more than 2.1 per cent higher than what Dr Hausman estimates is necessary to cause efficient mobile termination pricing;
- 50 per cent of people say that they keep fixed to mobile calls shorter than fixed to fixed calls because of the higher costs of fixed to mobile calls. This is more than eight times the amount of economic substitution that is necessary to cause a competitive result in mobile termination pricing; and
- 70 per cent of mobile subscribers at times substitute mobile to mobile calling for fixed to mobile calls. Mobile penetration in Australia and the UK is about 50 per cent of the population; so this means that 35 per cent of total subscribers substitute mobile to mobile calling for fixed to mobile calling. Again this is five fold greater than the amount of substitution required to cause a competitive result.

2.14 Hence, basic economic substitution in fixed to fixed, mobile to mobile, and mobile subscription is amply sufficient to cause a competitive result. This ignores the range of other substitutes such as SMS, mobile to fixed call back and closed user-groups.

2.15 It is worth noting that the Oftel figures refer to residential customers. In the corporate, government and small to medium enterprise customer segments, it is possible that these customers are even more aware of, and concerned about, such rates. A significant number of large corporations belong to closed user groups and therefore are very concerned with, and aware of, termination rates.

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<sup>8</sup> If decreased incoming calls also decreases value to mobile subscribers and hence affects mobile subscription levels, the required decrease in calls to defeat an attempted price increase would be even smaller.

***Commission has underestimated the impact of closed user groups***

- 2.16 The Commission, at page 14 of its draft report, notes that closed user groups may assist in overcoming the problem of customer ignorance and lack of pricing signals. However, the Commission incorrectly concludes that this pressure is not that great — when in fact closed user groups are exploding in popularity.
- 2.17 Closed user groups usually entail groups of consumers — who call each other regularly — being offered special incentives to stay on a particular network. For instance, certain closed users can get special deals when they call from their fixed line to ‘friends and family’ on the network the mobile operator owns or has a relationship with. The Commission pointed out there have been a proliferation of closed user group offerings by companies like Telstra and RSLcom.
- 2.18 While we do not agree that there is customer ignorance and while there are a significant number of substitutes for calls from fixed to mobile calls, fixed to mobile closed user groups offer an additional ‘pressure point’ on termination rates. The problem with the Commission’s analysis is that it significantly underestimates the extent to which closed user groups are driving down mobile rates.
- 2.19 Indeed even since the Commission released its draft report in December 2000 there has been a mushrooming of new deals that either offer very competitive fixed to mobile rates (for closed users) or very competitive rates for services that are substitutes for fixed to mobile calls. For instance, Telstra has recently announced that it will provide cheap on net calls from a Telstra fixed line to a Telstra mobile at a capped rate of \$1.98. Further, Telstra’s closed user group packages are between 25 and 50 per cent off standard calls when calls are made from a fixed line to up to five Telstra mobile customers. Other carriers offer good deals which are substitutes for fixed to mobile calls — Vodafone offers 200 minutes of free mobile to fixed calls between Vodafone and Telstra after 7.00 pm.
- 2.20 In a recently released report, the European experience with closed user groups reinforces our experience in Australia:

*With more than half of mobile calls in some countries now directed to mobile phones, the cost of calling mobile phones is becoming the key area of price competition. Mobile operators have recognised the competitive importance of this and are launching products specifically designed to capture termination traffic from fixed networks. “On-net” calling price plans are the most obvious examples: calls from and to the same mobile network are offered at a significant discount (well below imputed incremental costs, or even sometimes free).*

*The success of these initiatives depends on users taking account not only of their own patterns of usage, but also the choice of mobile network made by their families, friends and colleagues. These economic units (or closed user groups) are becoming a significant factor in the choice of networks and the traffic patterns of consumers. This is supported by figures showing that 70% of European “multi-mobile” SMEs connect their mobiles to the same network (the same holds true for households).*

*SMEs and households are the most obvious “economic units” but evidence is emerging that friends, economically related businesses and ethnically defined communities also consume in “groups”. In Rome, for example, the Filipino community seems mainly to use Omnitel’s network. Studies report that there is a heavy bias of Orange customers in Ibiza clubs and pop music festivals. It is thus becoming evident that mobile networks are competing for entire communities, not just individuals. The rewards are potentially great: the operators most successful at capturing communities report that as much as half of their outgoing traffic stays on-net. This, incidentally, indicates that the majority of calls to mobiles are made to a relatively small number of individuals, whose network is well known by the caller, in direct contradiction to some pro-interventionists’ arguments about consumer ignorance.*

*Following the success of these “on-net” strategies, some MNOs have begun to compete aggressively for “off-net” mobile-to-mobile traffic, i.e. mobile traffic terminating on other mobile networks. For example, E-Plus in Germany sells mobile-to-mobile calls at the same price as calls to fixed lines (and below the costs it has to pay to terminate these calls). One2One, in the UK, sells peak calls to other mobiles at €0.32 per minute. This is cheaper than any fixed-to-mobile call at that time of the day and less than half its competitors’ rates.*<sup>9</sup>

- 2.21 The same direct competition in mobile termination services is presently occurring in Australia. For instance, Hutchison Communications Mobile HomeZone product has termination charges equivalent to fixed line carrier termination charges when the Hutchison mobile is located in the HomeZone. This is so the mobile subscriber receives a similar level of calling (when the mobile is in the HomeZone) as if the consumer had subscribed to a fixed telephony connection. Hence, there is direct competition between carriers in terms of product innovation through differentiated mobile termination charges.

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<sup>9</sup> Investors in Mobile, 2001, “Our Mobile Future, Mobile Call Termination: A Suitable Case For Intervention”, pp. 8–9

***Illogical assertion imposes false circularity in the Commission's argument***

2.22 It should also be noted that the Commission's paper appears to impose an unsustainable circularity to its argument that calls into question the Commission's model, and would appear to lock the ACCC into perpetual regulation. This problem with the model and its associated chain of logic and assumptions is found in the appendix to the Commission's draft report. The Commission says:

*"At present it appears that fixed line carriers have only one (average) price for a fixed-to-mobile call, regardless of which mobile carrier is being called. Under such a pricing structure the benefits of providing additional information to end-users making fixed-to-mobile calls are likely to be relatively small."*

*"The Commission notes that fixed line carriers providing fixed-to-mobile calls already have the opportunity to provide additional information, in some of the ways proposed in submissions. The fact that they currently do not provide such information may indicate that, given the existing pricing structure for fixed-to-mobile calls, the benefits of providing additional information are limited."*

2.23 When the component parts of this statement are broken down, and coupled with the rest of the argument in the paper, the Commission appears to be saying:

- (a) Mobile termination rates are subject to market failure because there is consumer ignorance of individual carrier termination rates caused by not enough information about such rates;
- (b) This customer ignorance and associated market failure means that it is necessary to price regulate mobile termination rates;
- (c) The mobile carriers do not currently provide 'additional information' to consumers on what their differentiated termination rates are; and
- (d) However, it does not matter that the carriers don't provide this information, because it is unlikely that even if they did it would make any difference anyway.

2.24 There are clearly a number of problems here. It is not possible to hold that the fundamental reason for market failure (and therefore the need to regulate) is that consumers do not know what different termination rates are and *also* to hold that, 'the benefits of providing additional information are limited'. Further, as a point of correction the carriers do provide this information to their customers. The carriers provide itemised monthly bills

which clearly show the mobile number that has been called, the time of day that call was made, and the total charge that was levied for that call. In addition carriers do have differentiated FTM calling charges depending on which network is being called. For instance, Telstra offer differential FTM calling to its own mobile customers, and different prices to Optus and Vodafone mobiles. Likewise, Cable & Wireless Optus similarly differentiates call charges to different mobile networks. Also, all carriers charge different and cheaper retail rates to Hutchison Mobile Homezone product, equal to fixed to fixed calling charges, and this reflects the lower termination charges to the Hutchison mobile phone when located in the HomeZone.

- 2.25 Customers do know about such differential charging structures, as is reflected by their consumer behavior and calling patterns.
- 2.26 Cable & Wireless Optus therefore requests that the Commission clarify its argument in its appendix and clarify whether more information would overcome the market failure problems said to exist in the Commission's draft report. In particular, we request the Commission to clarify what information needs to be provided to overcome the customer ignorance assumption the Commission asserts exists.



### **3. Competitive substitutes — mobile termination is not a bottleneck**

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3.1 This section makes the following points:

- (a) The Commission has assumed that terminating access is a bottleneck;
- (b) It is economically incorrect to assume termination is a bottleneck because there are multiple *paths* to contacting consumers and numerous substitutes to fixed to mobiles calls; and
- (c) The elasticities associated with calls from fixed to mobile calls mean that terminating access cannot — economically — be a bottleneck.

#### ***Overview of Commission's position — termination is a bottleneck***

3.2 The Commission essentially argues that terminating access on GSM networks is a bottleneck. This clearly denotes that there are no substitutes to GSM termination and carriers that control terminating access can, in the absence of regulation, keep prices above competitive levels for non-transient time periods.

3.3 For instance, at page 11 of its draft report, the Commission says that their consultants found that 'there is no possibility of substitution and this means that the mobile carrier has control over access'. Further, at page 15 of the draft report the Commission says that 'control over terminating access...allows mobile carriers to sustain high access prices when the service is used to supply fixed to mobile calls as access prices are an important source of revenue'.

3.4 It is noted that carrier churn averages 30% of the total subscriber base per annum. Hence, the notion of a temporary bottleneck, where 30% of subscribers change terminating provider each year, is not a reasonable economic proposition (unless the assumption customers do not care about incoming calls is made). If the bottleneck is exploited, sufficient consumers will churn to other carriers' termination service rendering the attempted exercise of market power futile.

#### ***Economically incorrect to assume that it is a bottleneck***

3.5 As stated above, if a carrier has a bottleneck facility, it means they control a facility which is difficult to duplicate (ie there are high sunk costs and natural monopoly characteristics), there are no economic substitutes to getting access to the consumer served by the bottleneck and prices are not

constrained by substitutes. These characteristics are often found to apply to traditional PSTN networks due to 95 % concentration of terminations in a single supplier, and no legitimate substitutes (actual or potential) to that supplier for a large proportion of these subscribers. However, bottlenecks do not apply to mobile networks or mobile customers.

3.6 This is because, among other things, there are a myriad of economic substitutes or alternative paths to customers with mobile phones. These include:

- (a) fixed to fixed calling;
- (b) mobile to mobile calling;
- (c) shorter duration calls;
- (d) email;
- (e) Mobile to fixed callback;
- (f) SMS to the mobile from a mobile;
- (g) Web based SMS to mobile; and
- (h) Faxstream and paging services.

3.7 It is illustrative to look at the pricing of and use of some of these services to provide the Commission with guidance on how the existence of such products constrains pricing of mobile termination rates. For instance, Oftel found 70 per cent of mobile users substitute mobile to mobile calls for fixed to mobile calls. In Australia, pricing of mobile to mobile calls — at certain times and between the same network — can be free. This means that people actually choose to make a mobile to mobile call rather than a fixed to mobile call and the pricing of these types of calls constrains the pricing of fixed to mobile calls.

3.8 The Oftel study also found that 51 per cent of people make shorter fixed to mobile calls, due to the higher per minute costs, than fixed to fixed calls. This clearly means that often consumers will make a fixed to fixed call and other communications in substitution for a long-held fixed to mobile call. It is clear that consumers are substituting fixed to fixed calls for fixed to mobile calls. If carriers want to get incremental revenue onto their networks they will have to competitively price their termination services. Clearly, this has been happening for some period of time already. The Orange offer of 20 cent local calls to mobile calls in certain local call zone areas is a good example of a mobile phone company providing a product to compete with fixed to fixed calls and fixed to mobile calls.

- 3.9 The short message services which all the major carriers offer, provides an alternative path to consumers. Since SMS has been available across all mobile networks, there has been an explosion in SMS messaging. For example, Optus Mobile customers sent 13 million messages per week in January 2001, compared with 6 million messages in July 2000.
- 3.10 A significant portion of this increase in SMS messaging is economic substitution from voice calls. The youth segment of the mobile market, in particular, has embraced SMS messaging, causing an SMS peak load between 4pm and 7pm each day. The youth market is clearly substituting voice calls for SMS messages because SMS, at 20 cents per message, is a cheaper alternative compared to voice calls.
- 3.11 Even inter-network FTM calls have a range of alternative substitutes. For example, a call from a Telstra fixed phone to a Vodafone mobile is constrained by free callback: 200 minutes per month of free Mobile to fixed calling after 7 pm offered to Vodafone mobile subscribers. Other mobile networks, such as CWO, offer free mobile originating calls per month equal to monthly subscription fees (with carry-over credit within three month periods). Hence free MTF calling is a real and effective substitute for these consumer groups. As found by Oftel, 70 % of mobile subscribers substitute MTM for FTM calling in certain circumstances due to the lower prices of MTM calling in particular instances.

***Bottleneck argument unsustainable given elasticities***

- 3.12 The Commission's analysis assumes that carriers have monopoly or bottleneck control over access to GSM termination. However, as is well known, monopoly theory says that for a monopoly to extract monopoly prices, the elasticity of demand for the monopoly service must be greater than 1 (the monopoly result). This therefore means that for the mobile operator to have monopoly power on terminating access, the fixed to mobile retail price has to be in the elastic region of the demand curve. Indeed King and Gans predict the double marginalisation result for FTM calling which has the elasticity much greater than 1.
- 3.13 There is, however, no empirical support for the proposition that fixed to mobile calls have elasticities anything close to 1 or the monopoly result. For instance, Access Economics has estimated the FTM elasticity at 0.08. Using our own market data, Cable & Wireless Optus estimates the long-run elasticity of demand for FTM calls at between 0.3 and 0.5 at current retail prices. Further, it is our understanding that Telstra estimates the FTM elasticity at between 0.5 – 0.7.
- 3.14 The Commission itself does not believe the FTM retail elasticity of demand is anywhere near the bottleneck monopoly result of greater than one (or the market power result). For instance, it is Cable and Wireless Optus'

understanding the Commission's own independent estimate of the FTM retail elasticity of demand is less than .3, and the Commission used this estimate for its Retail Price Control modeling work. The Commission cannot simultaneously subscribe to the views that mobile termination is a bottleneck in the FTM call case and that the retail elasticity of demand for FTM calls is .3. If mobile operators have and are exercising market power over termination, the retail elasticity of demand for FTM calls must be greater than 1.

- 3.15 Therefore, four independent estimates, including the Commission's own view, indicate current pricing is in the inelastic region of the FTM demand curve, and hence nowhere near the monopoly level, or the (higher) double marginalisation result. No evidence has been put forward suggesting the FTM elasticity is greater than one, which is necessary for bottleneck monopoly pricing to occur.<sup>10</sup>

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<sup>10</sup> The Commission has the available data to itself estimate the FTM elasticity of demand, given it is required to monitor Telstra's compliance with Retail Price Controls.

#### **4. Reason for forbearance rejection is not correct**

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- 4.1 The Commission's only reason for rejecting forbearance is that it does not believe sufficient evidence has been presented which demonstrates that mobile pricing is being constrained to efficient and effective levels by competition:

*“Submissions to the Commission from Cable & Wireless Optus argued that any regulation of the GSM termination service would diminish consumer surplus. The Commission understands this analysis to be an attempt to compare the consumer surplus gained by a reduction in access prices for GSM termination against the consumer surplus lost by a corresponding increase in mobile access service fees. The Commission does not, however, accept these arguments as it believes that a critical assumption underlying this assessment — effective competition currently constraining access prices for GSM termination (and mobile access service fees) to efficient costs — has not been adequately supported by Cable & Wireless Optus or any other submissions.*

*Rather, evidence was provided to the Commission that appears to suggest the efficient costs of providing the GSM termination service are considerably lower than current access prices for GSM termination.”<sup>11</sup>*

- 4.2 This is not correct. Cable & Wireless Optus and other carriers have put to the Commission very detailed accounting and financial evidence showing the return on capital in mobiles is very low, and presently below normal levels for mobile operators. No evidence has been put forward of excess profits by the Commission and / or other parties. The Commission's own consultant economists concluded there would be no excess profits in the system.
- 4.3 The Commission does not itself cite or adduce any evidence that suggests that mobiles carriers are earning well above cost. If it were the case, one would expect mobile carriers to be earning returns above their cost of capital. This is not the case as is now discussed.

#### **Competition is efficiently constraining prices**

##### **Mobile operators earning below cost of capital**

- 4.4 In terms of financial accounts, the data is clear — mobile operators are making substantial losses and not earning their opportunity cost of capital

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<sup>11</sup> ACCC GSM paper , p. 46

concerning their present investments. For example, Cable & Wireless Optus' accumulated losses as at March 31 2000 from the start of its operations in 1992 are \$365 million. Cable & Wireless Optus' performance over the last three years (measured to March 31 2000), is a loss of \$590 million in 1997–98, a loss of \$10 million in 1998–99, and a profit of \$264 million<sup>12</sup> in 1999–2000. Earnings this financial year were on a total capital base of \$8.4 billion. Hence, the total return on capital was 3 per cent, and this earnings level is not even one third of what would be required by normal capital markets to sustain ongoing investment. In other words, the returns on capital would need to rise by at least 300 per cent for Cable & Wireless Optus to be earning a normal rate of return.

- 4.5 In terms of other mobile operators accounting data, Vodafone has recorded a net loss in every year it has operated, and is yet to earn any return on its capital investments. Since One.Tel announced and carried forth its plans to enter mobile telephony, its losses have substantially risen. It recorded a loss of \$390 million for this financial year. Hutchison Telecommunications has also recorded substantial accounting losses since entering mobile telephony in Australia.
- 4.6 Hence, present returns on investment as measured by the financial accounting data of the various other mobile carriers shows returns are significantly below a normal cost of capital.
- 4.7 A second method for measuring whether, notwithstanding current below normal returns, there may be expected future<sup>13</sup> above normal profits is to look at stock-market performance. For example, while present earnings may be below a reasonable level, if future earnings were expected to be high (and sustained at higher levels than in other industries), this would be expected to be reflected in stock-market data. This data would, for example, show share price accumulation for the stock that is higher than for the market as a whole.
- 4.8 The following graphs<sup>14</sup> compare the rate of return earned by mobile operators, as measured by share price growth and dividend payments verses the market as a whole:

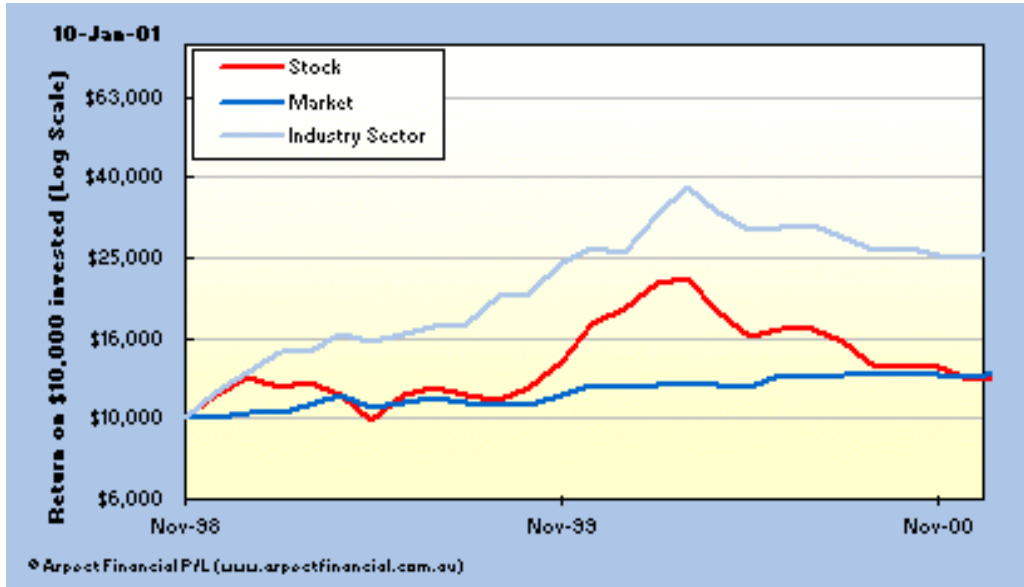
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<sup>12</sup> This is profit using the accounting definition of revenues less costs and does not correspond to the economist's notion of profit.

<sup>13</sup> Telecommunications is a capital-intensive industry with rapid technological change meaning current investments need be written-off rapidly. For example, present 2G networks will be replaced with 3G networks in the next four years.

<sup>14</sup> These graphs have been downloaded from the Commonwealth Securities Website.

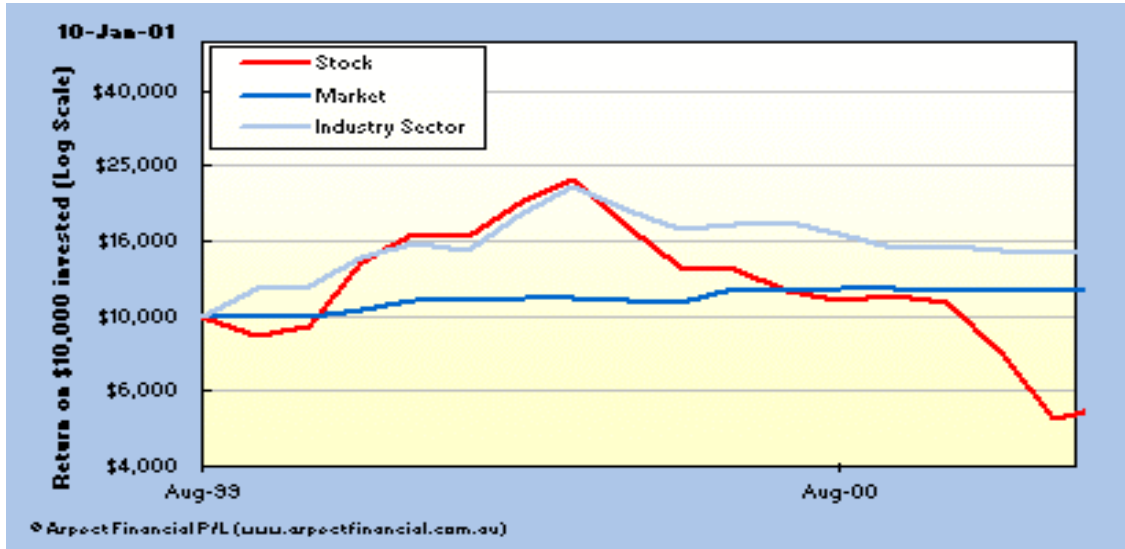
**Cable & Wireless Optus share price performance since listing.**



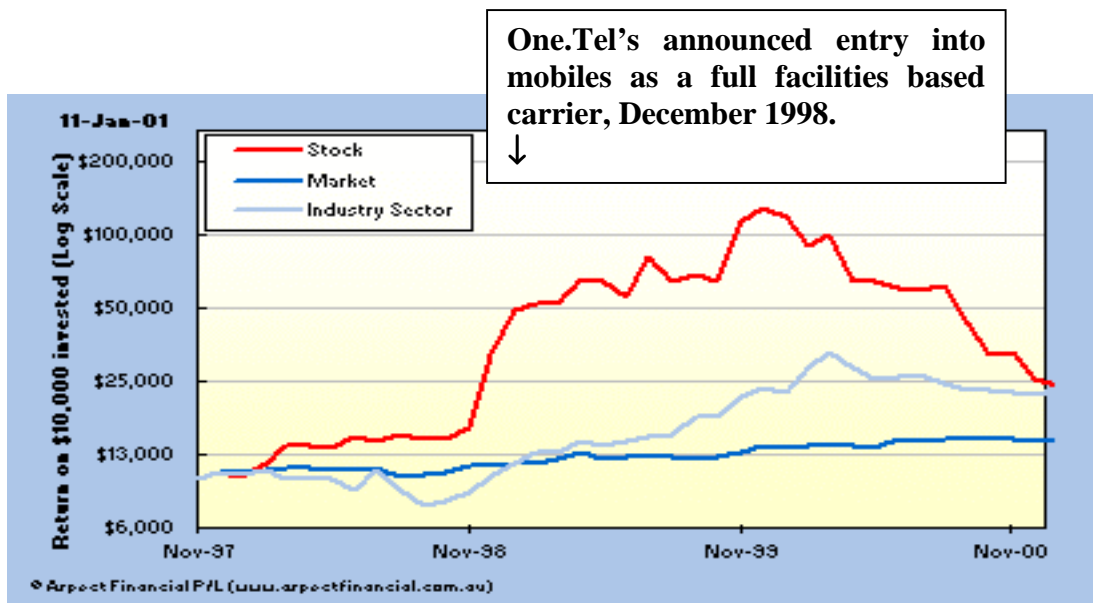
4.9 This graph shows the rate of return earned by Cable & Wireless Optus since listing in 1998 to January 2000 is below a normal market rate of return.

4.10 The next graph is instructive because it measures the rate of return of Hutchison Communications, the only 'pure play' mobile operator presently listed on the Australian Stock Exchange. It shows Hutchison's rate of return as compared to the market as a whole up to January 2000 was significantly below the normal market rate of return.

**Hutchison Communications rate of return since stock-market listing**



**One.Tel Communications rate of return since stock-market listing.**



4.11 This final graph shows One.Tel's rate of return since listing. Importantly, One.Tel announced plans to roll-out a nationwide GSM network in November 1998. Since this time, and has made a substantial investment in mobile infrastructure, however its share price has gone substantially backwards in real terms by approximately 26 per cent. This compares to a real gain in the stockmarket overall of over 20 per cent. That is, since One.Tel decided to enter



the mobile industry as a facilities-based carrier its share price has substantially decreased in both real and nominal terms, whilst average stock prices have risen more than 20 per cent.

- 4.12 In addition, in year 2000 Vodafone decided to postpone the float of its mobile business due to fears of a poor listing performance.
- 4.13 It is also worth noting that the move to 3G networks is going to dramatically increase mobile costs of network roll-out. Depreciation schedules for current networks need to be rapid for carriers to extract sufficient revenues to earn their cost of capital from current 2G networks. It is predicted that with the arrival of 3G networks, 2G networks will be come obsolete much faster than would otherwise have thought to have been the case. Hence the large devaluation in current mobile carriers share prices worldwide. This significant upgrade to a virtually new network will mean that mobile carriers will have to depreciate their current mobile networks over a shorter time period, than previously thought, of between two to four years.
- 4.14 In addition, 3G will substantially change both the relative and absolute incremental costs of voice and data services supplied over mobile networks. Voice costs will increase under 3G and data costs will decrease. The 3G frequency, because of the shorter Cosine wave, allows a greater amount of data to be sent to mobile phones using the spectrum — presently up to 2 megabits. However, this shorter Cosine wave also means the signal does not travel as far from base stations to handsets with significant attenuation. Hence, significantly more base stations per geographic area are needed for 3G networks relative to 2G networks to support voice services. This means both the relative and absolute costs of supplying voice minutes on 3G networks is higher than for 2G networks, and the data costs are lower.
- 4.15 Cable & Wireless Optus' current EBIT figures presently support a WACC of 6.7 per cent even if our networks are depreciated over a period longer than 6 years. At this stage in the 2G network lifecycle our WACC needs to be at least 15 per cent to make up for past year losses in laying the network, and to ensure an at least normal rate of return over the full run of the network..
- 4.16 Hence, there is no empirical evidence supporting the proposition that current mobile operators are earning above normal returns, or are expected to earn above normal returns in the future. Indeed, all current market evidence suggests the contrary.
- 4.17 However the Commission does appear to believe that there are excess profits. In its Draft Report, the Commission uses its suspicion of excessive returns to reject the option of regulatory forbearance.
- 4.18 Given the above evidence that excessive returns are not being earned in the mobile industry, Cable & Wireless Optus believes that before the Commission confirms that forbearance is not its preferred option, it should:

- (a) state what evidence it is using to support the proposition of excess profits, and why the evidence supports the proposition<sup>15</sup>;
- (b) state its reasons for rejecting the King and Gans assumption that mobile operators are not earning excess profits, whilst accepting the King and Gans consumer ignorance assumption.

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<sup>15</sup> In particular, Cable & Wireless Optus requests, if the Commission does have objective evidence supporting excess profits, that the Commission detail such evidence in its next iteration. This will assist open, transparent and fair processes, and facilitate improved decision-making. For example, it is very difficult for CWO to meaningfully respond to the amorphous normative statements presently contained in the Commission paper “evidence was provided to the Commission that appears to suggest the efficient costs of providing GSM terminating services are considerably lower than current access prices for GSM termination”. This is because the evidence that forms the basis of the Commission statement is not been detailed to the parties. This is important because it is the only substantive reason given by the Commission to reject the forbearance option.

## **5. Commission has failed to show welfare gain from its proposed intervention**

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### **Ramsey efficient and other pricing considerations**

- 5.1 Related to the existence or otherwise of excess profits, the Commission has not demonstrated the efficiency gains, in relation to forbearance that would arise from implementation of its proposed pricing methodology.
- 5.2 Cable & Wireless Optus believes, to justify intervention, the Commission should demonstrate how the prices for mobiles they propose will differ from the forbearance outcome. In addition, the Commission must outline the welfare gains arising from this different pricing versus forbearance.
- 5.3 Without demonstrating that its pricing approach will increase consumer welfare, it is not possible for the Commission to demonstrate that its approach is in the long-term interests of end users — the relevant legislative test under Part XI C of the Act. This would be a minimum test necessary to satisfy departure from commercial prices in an ACCC Part XI C determination.
- 5.4 This is also the process previously followed by the Commission in relation to its previous arbitration and undertaking decisions in respect of Telstra's PSTN originating and terminating services. There the Commission demonstrated the welfare gains in terms of improved allocative, productive and dynamic efficiency from its decisions.
- 5.5 In terms of the Commission's final pricing paper, Cable & Wireless Optus believes it is necessary for the Commission to show how its proposed prices would differ from forbearance, and why such prices are more efficient than forbearance. The demonstration should also have regard to two factors:
  - (a) Ramsey efficient pricing — this principle dictates retail services that have inelastic demand bear proportionally more of the fixed and common cost recovery of mobile networks. We have previously detailed evidence indicating FTM retail demand is inelastic.<sup>16</sup> It is our understanding that the Commission independently believes the retail FTM calls are highly inelastic (less than 0.3), and used such an assumption for the purposes of Retail Price Control modeling work. Therefore, the Commission should be required to show, given its views on the elasticity of FTM calling, whether social welfare increases or otherwise with a proportional change in the burden of fixed and common cost recovery borne by FTM calls — as proposed by the Commission's pricing methodology.
  - (b) The Commission should account for the "penetration externality" in its welfare analysis. In particular, it is both efficient and fair that callers to

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<sup>16</sup> This may differ across different classes of calling customers; for example whilst overall FTM calls may be quite inelastic, amongst certain categories such as closed user-groups demand may be more elastic. Hence, price differentiation of FTM calls amongst these groups promotes consumer welfare by allowing a more efficient recovery of mobile operators fixed and common costs.

mobiles bear some of the fixed and common cost recovery burden of the mobile subscription decision. This is because callers to mobiles receive benefits from this subscription decision. Therefore, callers to mobiles should help to partially fund this subscription. This will cause higher mobile penetration and higher social welfare.

- 5.6 Dr Graeme Woodbridge of Frontier Economics has also undertaken modeling work in this regard.<sup>17</sup> Dr Woodbridge finds that a welfare loss to society from a decrease in mobile termination charges is robust to a number of different assumptions concerning the elasticity of demand for mobile subscription and FTM calling. As discussed by Dr Graeme Woodbridge in his paper:

*“The prediction that decreasing fixed to mobile termination charges to marginal cost will reduce social welfare holds for a range of assumptions concerning the elasticity of demand for mobile subscription. It also holds for a wide range of assumptions concerning the elasticity of demand for fixed to mobile calls. For example, if the elasticity of demand for mobile subscription is 0.8, then the elasticity of demand for fixed to mobile calls must exceed 7 for there to be a beneficial effect on social welfare. If the elasticity of demand for mobile subscription is 0.2, then the elasticity of demand for fixed to mobile calls must exceed 1.1. Neither are likely.”*

- 5.7 Therefore, Dr Woodbridge shows there are no welfare gains from pushing the termination price down unless unrealistic elasticity assumptions are used. Given the elasticity of demand for FTM calling, according to our understanding the ACCC estimates at .3 or less, there is unlikely to be any welfare gains from pushing down the termination price.
- 5.8 Dr Julian Wright has made another important contribution in this area. In a calibrated version of Dr Wright’s model, on the assumption of a mobile subscription elasticity of 1.5, FTM elasticity of 0.5 and mobile penetration of 50 per cent, consumer efficient prices for mobile termination are between 3 and 5 times greater than incremental cost.<sup>18</sup>
- 5.9 Given these elasticities and modeling work, Cable & Wireless Optus believes it is difficult for the Commission to demonstrate an increase in consumer welfare from a decrease in mobile termination prices — an observation which has informed our advocacy of regulatory forbearance.
- 5.10 However, if the Commission believes that its approach can increase consumer welfare, it is required to undertake this demonstration for Part XI C legal purposes, and should detail this analysis in its Final Report. This is consistent with the Commission’s approach in its assessment of the PSTN Undertaking. The Commission demonstration of welfare gains should be done in an open and

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<sup>17</sup> See Woodbridge February 2000.

<sup>18</sup> See “Competition and termination in Cellular networks” by Dr Julian Wright, University of Auckland, 25 January 2000.

transparent manner so carriers can provide comment on the analytical work — as the Commission has previously done with respect to Telstra’s PSTN originating and terminating access. It should be rigorous economic analysis, not a set of normative or descriptive sentences.

- 5.11 It may also be helpful for the Commission to also provide a short statement concerning its objectives in promoting consumer welfare — via the usurpation of mobile operators ability to set commercial prices to resellers of the FTM call case. As the Commission is aware, the current debate on mobile termination pricing is essentially between facilities-based carriers and arbitrage based resellers of the FTM call case. The later group seeks a large “rent transfer” of mobile operators property through the Commission interfering in normal market processes, and awarding such resellers lower wholesale prices than dictated by the current market process.
- 5.12 Cable & Wireless Optus believes the Commission should not, in fact, be involved in such issues. Mobile competition is fully effective<sup>19</sup> as evidence by the CRU report showing increases in consumer surplus of over \$3 billion per annum in 19992000. We have written to the Commission in December 2000 requesting the revocation of the declaration of mobile services. This inquiry should commence immediately because there is no evidence of market failure in mobiles, and or that the declaration is working in the interests of consumers.

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<sup>19</sup> The Commission’s Draft Retail Price Control paper recommending removal of mobiles from the retail control basket, agreed with the assessment that mobile competition was effective.

## 6. The ACCC's proposed pricing methodology

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- 6.1 As outlined above Cable and Wireless Optus does not support the Commission's proposed pricing principles. However, if the Commission is minded to implement these principles our position is as follows:
- (a) Linking retail prices with wholesale prices is likely to be distortionary;
  - (b) The 'glide path' the Commission uses must be consistently applied — it is not possible, nor is it desirable, for the Commission to constantly adjust its basket to reflect each market development;
  - (c) Any weighted basket must exclude 'on net' pricing if the mobiles market is to continue to be dynamically competitive and innovative in its offerings; and
  - (d) The start point that the Commission adopts to regulate mobiles should not be the lowest price but the weighted average termination rate.
- 6.2 This section provides a brief overview of the Commission's current proposed approach to GSM termination, some of the economic distortions inherent in this approach, and then addresses each of the points above.

### *The Commission's recommended pricing regulation*

- 6.3 The Commission has considered a range of pricing methodologies, including:
- (a) Forbearance;
  - (b) Marginal/incremental pricing (including both short run and long run incremental cost pricing);
  - (c) A retail minus methodology; and
  - (d) A benchmarking approach.
- 6.4 The Commission has recommended a benchmarking approach, where:

*“Each mobile carriers access price for mobile termination will:*

- *Initially be set at the lowest current access price for GSM termination in the market; and*

- *Then be pegged to the percentage change in its weighted average retail prices for mobile services (subscription and retail calls)."*<sup>20</sup>

***Linking regulated mobile termination rates with a weighted average retail rate is likely to be distortionary***

- 6.5 The Commission has recommended that mobile termination prices should be linked with a weighted average measure of individual carriers retail prices, in the belief that competition at the retail level is fully effective, whilst competition at the termination level is not as effective<sup>21</sup>. Linking the two prices is seen as a way to ensure that fixed to mobile consumers benefit from mobile competition at the retail level.
- 6.6 However, this pricing approach will have the effect of distorting competition at the retail level in a number of ways:
- Operators' pricing decisions at the retail level are likely to be influenced by the Commission's proposed pricing approach, hampering pricing innovations, and potentially leading to less efficient and flexible pricing of the components of mobile service;
  - The Commission's methodology may cause mobile operators to channel effective price reductions to consumers through non-price terms and conditions of supply, rather than price<sup>22</sup>, in the retail market. While consumers will still benefit from this non-price competition, the effect of regulation will be to distort market conduct in an economically inefficient manner;
  - Operators' ability to dynamically respond to changes in consumers' elasticities of demand over time, revelation of more accurate information on elasticities, and changes in cost balances between mobile subscription and airtime minutes, will be diminished. The Commission's pricing approach effectively freezes the current ratio of retail and wholesale prices. This will not be an economically efficient vector of prices through time; and
  - Operators' will be impeded in changing the per unit prices of voice and data services in response to changes in technological costs caused by, for example, the rollout of 3G networks.

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<sup>20</sup> Australian Competition and Consumer Commission, December 2000, Pricing Methodology for the GSM Termination Service, Draft Report, p. 52

<sup>21</sup> It is noted that such analysis is not correct given the Commission has concluded mobile operators various revenue streams are interdependent. Effective competition at the retail level means mobile operators earn their cost of capital, and the vector of prices arising, including the mark-up above marginal cost on mobile termination to recover fixed costs, is a residual of this competitive process. Hence, it is not sensible to discuss this mark-up on termination in isolation of these other factors that are determinative of the general equilibrium outcome — including the mark-up on termination.

<sup>22</sup> This is because the distortion to efficient pricing caused by violation of Ramsey efficient cost recovery principles in the regulation of mobile termination will motivate operators to channel lower effective prices to consumers through improved non-price terms and conditions of supply.

- 6.7 The three main mobile revenue streams, access, usage and termination, are inter-related. Operators have engaged in a dynamically competitive process of pricing each component towards a Supra-Ramsey<sup>23</sup> efficient equilibrium. Operators have offered a variety of pricing plans, so that different classes of consumers are identified and sorted according to their varied elasticities of demand for each component of mobile service — efficiently segmenting the market to the benefit of consumers.
- 6.8 Operators have found that demand for mobile termination services in the FTM call case is less elastic than the mobile subscription decision. Therefore, economic efficiency demands mobile subscription bears less of the fixed cost recovery burden than mobile termination in the FTM call case. For other consumers, mobile termination pricing is crucial, for example if they call family members or intra-corporate employees a lot. Therefore, different pricing plans with lower termination fees amongst these closed user groups, are provided to this type of consumer. Using this sort of flexible approach to pricing, operators have expanded the market far faster than any ‘one price fits all’ approach could ever achieve.
- 6.9 Crucially, different operators had the scope to take different pricing approaches to the market, and strive to achieve competitive advantage through pricing innovation. For example, Telstra has a relatively high proportion of large corporate customers; therefore lower termination fees amongst these intra-corporate calls will promote welfare amongst this consumption group. In contrast, operators such as One.Tel may be more focussed on targeting the residential mass consumer market, where higher termination fees will more correctly account for and capture the “penetration externality” and the marginal nature of the mobile subscription decision for this particular class of customers. Whether this pricing innovation has resulted in different operators funding the fixed cost recovery burden in different ways (some with relatively higher termination charges and others with relatively higher subscription fees) is not important — consumers benefited from diversity in pricing approaches.
- 6.10 Linking retail prices with the lowest mobile termination rate in the market to form a ‘glide path’ threatens this pricing innovation, and may lower consumer welfare.
- 6.11 Where operators once devised retail offerings with the express purpose of leveraging vigorously in the retail market, in the future, this competition could be less vigorous, as any retail price reduction will flow through to lower mobile termination rates.
- 6.12 Operators may now have a strong incentive to compete at the retail level on non-price terms, rather than via price reductions. In other words, they have an

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<sup>23</sup> The term supra Ramsey is used to connote the requirements for super-elasticities to be used to correctly account for the penetration externality in mobile pricing. Lower subscription fees increase penetration; this increases overall market size allowing greater economies of scale and scope to be realized. This dictates the mark-up on mobile termination for FTM calling needs be slightly above that dictated by normal Ramsey pricing; it is only consideration of super-elasticities, that account for cross-price elasticity effects, that will provide the economically correct solution to this problem.



incentive to compete on items that are not included in the basket of services that the Commission will be monitoring to obtain its benchmark indices. There are a wide range of ways operators could reduce the effective price of mobile services which could not be measured in any weighted average basket. For example, operators could give away complementary goods, prizes, memberships etc, all of which help to compete at the retail level, but would not be measured in the Commission's 'glide path'.

- 6.13 The Commission could respond by attempting to measure a weighted average basket that attempts to take the proliferation of non-price competition offers into account, effectively placing a valuation on these non-price offers. But this could prove quite difficult to implement and place a large informational and compliance burden on both the Commission and operators.
- 6.14 Perhaps most importantly, the 'glide path' linkage damages operators' ability to continually seek Ramsey efficient prices. While operators currently and continually revise prices towards the Supra-Ramsey efficient equilibrium, this is a constrained optimization process.<sup>24</sup> The vector of prices is continually updated and modified reflecting further and improved information — movement towards the Ramsey efficient result. It is a dynamic process. If the Commission adopts a methodology that freezes the ratio of retail to wholesale prices (on average at least), the ability of operators to move towards the dynamically efficient Ramsey result through time will be compromised.
- 6.15 Elasticities of demand change over time, as consumers' tastes and preferences shift in response to new products and changes in the level of mobile penetration. For example, as already argued, the emergence and take-up of mobile service amongst closed user groups has materially altered the elasticity of demand for mobile termination amongst these groups, and can be expected to increase in importance over time. In a freely operating market, operators can respond to these changing elasticities, and efficiently target different consumer segments with innovative offerings. Unconstrained operators will constantly shift the balance of their charges to maximise economic efficiency, which, indirectly, also serves to maximize consumer welfare.
- 6.16 However, with the Commission's 'glide path', this flexibility to adapt to change is reduced. In the situation where operators' mobile termination rates are held constant with respect to retail charges, this dynamic process of pricing efficiency is damaged.
- 6.17 The distortions inherent in linking retail and wholesale prices are difficult to avoid if the Commission is minded to proceed with its recommended pricing approach. Cable & Wireless Optus believes that if the Commission proceeds, it should do so on the basis that mobile operators and access seekers requesting

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<sup>24</sup> In particular mobile operators are subject to Bayesian bounded rationality. This means they will never, in fact, be at the Pareto Optimum equilibrium at any particular point in time, but will continually move **towards** this moving equilibrium target through time. In this manner effective competition should be thought of as a dynamic equilibrium process rather than a static steady state outcome.

arbitration have maximum transparency of the design of the weighted average retail basket. This will ensure that market distortions are reduced.

- 6.18 In our view the Commission should resist the temptation to constantly adjust the basket, and second guess the market behaviour of operators. Constantly adjusting the basket runs the risk of significantly reducing pricing innovation and lowering consumer welfare.

### *3G changes in relative costs*

- 6.19 In addition, 3G technology will substantially change both the absolute and relative incremental costs of voice and data services supplied over mobile networks. Voice costs will increase using 3G and data costs will decrease. The 3G frequency, because of the shorter Cosine wave, allows a greater amount of data to be sent to mobile phones using the spectrum — presently up to 2 megabits. However, this shorter Cosine wave also means the transmission signal can not travel as far from base stations to handsets without significant attenuation and interference. Hence, significantly more base stations per geographic area are needed for 3G networks, relative to 2G networks, to support voice services of a given Grade of Service (GOS). This means both the relative and absolute costs of supplying voice minutes on 3G networks are higher than for 2G networks, and the data costs are lower.
- 6.20 However a problem with the Commission's proposed methodology, which we understand will measure the total price of the total output of mobile networks, is that it will impede the efficient incremental changes in prices of these voice and data outputs of mobile networks. In response to 3G cost changes, *ceteris paribus*, mobile operators would like to be able to decrease the price of data and increase the price of voice. The problem is, if mobile operators decrease the price of data under 3G, under the Commission's current pricing methodology, the operators may be forced to unnaturally also lower the price of voice services — not in accordance with the correct economic principles of incremental cost recovery. The technology changes associated with 3G, in fact, may dictate that economically efficient prices for voice should not decrease at the same (higher) rate as data.

### *Changes in handset, access and per minute costs through time*

- 6.21 A second problem with the methodology is, unless carefully implemented, it will distort the relative price of mobile access to minutes of use in the market — where these mobile network outputs are subject to different changes in costs through time. For example, if handset and access costs dramatically decrease due to technological change, but airtime prices remain about constant, economically efficient pricing dictates that subscription charges should decrease significantly, whilst airtime rates should remain about the same. However, the problem is if mobile operators decrease their subscription charges, they will be unnaturally forced under the Commission's proposed methodology to decrease mobile air-time termination rates in a corresponding manner. This unnatural

decrease in mobile termination charges will be economically inefficient because airtime costs may not have decreased to the same extent as mobile access costs.

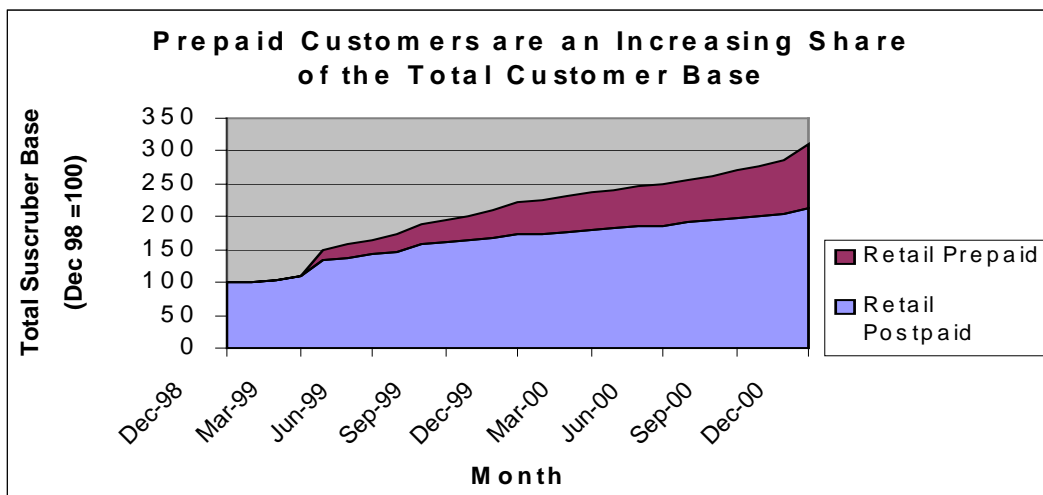
6.22 In other words, the Commission’s methodology can only maintain a reasonably efficient balance of relative prices between airtime and access if the change in technology costs of these outputs is relatively constant through time. However, there is no priori reason to pre-suppose this will be the case.

**Measurement problem**

6.23 A second and related issue involves the measurement problem associated with basic mobile subscription access. Mobile subscription prices in absolute terms, per average user, have decreased in the last three years caused by the rapid take-up and popularity of pre-paid mobile services. However, this change in absolute price mainly reflects the lower quality and costs of handsets in the pre-paid market.

6.24 The average cost of a pre-paid handset is approximately \$100, whereas the average cost of all handsets across the Cable and Wireless Optus customer base is approximately \$260. Cable and Wireless Optus introduced pre-paid services in March 1999, and now have approximately 1.2 million pre-paid subscribers of our 3.5 million-customer base. As Figure 6.1 shows, pre-paid, as a proportion of our total customer base has increase from zero in March 1999 to over 30 per cent of our total subscriber base today. Hence the absolute price decrease in subscription charges is mainly caused by the non-constant quality of handsets across the Cable and Wireless Optus mobile customer base through time.

**Figure 6.1**



6.25 Cable and Wireless Optus is concerned that if the Commission does not correctly implement its methodology, that changes in the quality of the product

supplied may be mistaken for changes in real prices of outputs. Therefore, we believe the Commission needs to develop a mobile subscription quality index to enable the proper implementation of its methodology, and the separation of price and quality changes to mobile users.

***Commission should convene a Working Committee to implement methodology***

- 6.26 The practical implementation of the Commission's proposed pricing methodology will be a highly complex and potentially contentious task, even with the best of intentions of all parties concerned. The Commission will need significant and highly detailed mobile carrier assistance and information to implement its proposed pricing approach in an accurate manner. We therefore recommend, if the Commission is not minded to forbear, that it immediately establish an ACIF Working Committee, or some similar inter-carrier regulatory forum, to assist in the expeditious and accurate implementation of the Commission's proposed methodology.
- 6.27 The convention of such a Working Committee will enable a more rapid, accurate and less contentious implementation of the Commission's proposed methodology. The Working Committee would ensure the practical implementation and measurement index of carrier specific mobile prices has broad inter-carrier support, and that the information required to implement the methodology is available and or able to be captured in current carrier data information systems.

***Implementation***

- 6.28 As argued below, to minimise the distortions of its recommended approach, the Commission should:
- (a) Use a weighted average starting price rather than the lowest observed price;
  - (b) Not include on net pricing in its retail basket;
  - (c) Select a constant range of access and usage charges for a defined period of time;
  - (d) Be careful when a decision to extend the basket to include data services is taken, as premature inclusion of data could inadvertently reduce innovation.
- 6.29 The following section discusses in more detail Cable & Wireless Optus proposed approach if the Commission proceeds with its recommended pricing approach.

### ***The starting point for the mobile termination rate***

- 6.30 The Commission has recommended that its 'glide path' should start at the lowest negotiated mobile termination rate, and then be fixed to the weighted average retail price going forward.
- 6.31 The Commission has decided against using the current access prices for mobile termination, as it considers that this would reward the operator with the highest negotiated termination rate.
- 6.32 Cable & Wireless Optus can appreciate the Commission's logic in not wanting to have a wide range of starting points, and can see why the Commission would not want to give undue advantage to operators with relatively higher mobile termination rates. However, these same operators are likely to have relatively lower mobile subscription prices, and the pricing plans will be more targeted towards the mass residential market. Hence, we believe that selecting the lowest termination rate is not the optimal way to set a starting point. It will favor certain mobile operators who have better targeted certain customer segments through low termination fees, versus other operators who have targeted other segments through low subscription fees.
- 6.33 Current commercially negotiated wholesale rates are differentiated for a variety of economic efficiency reasons. Different operators have different incentives in funding the fixed costs of mobile networks through different relative mark-ups on subscription, origination and termination services. Wholesale rates also reflect the different economies of scale that different operators enjoy.
- 6.34 While any form of price regulation is distortionary, selecting the starting point equivalent to the lowest negotiated access price exacerbates the problem. A weighted average comes some of the way to ameliorating the distortions inherent in any price regulation, as it provides a buffer to operators with differentiated wholesale prices that are targeting different segments of the market.

### ***Using the lowest rate in the market disadvantages new entrants and mobile pure plays***

- 6.35 Using the lowest rate in the market could disadvantage operators who are new entrants or mobile pure plays. Both new entrants and mobile pure play operators can be expected to have relatively higher mobile termination rates, and correspondingly lower subscription fees than more established operators, because these new entrants are, in general, targeting the mass consumer market. Hence, implementation of the "lowest" mobile termination rate in the market will substantially lessen competition in mobiles by penalizing these new entrants through their product differentiation strategy. The methodology effectively forces such operators to compete in a reduced domain of product differentiation, and inefficiently channel their entry strategy towards the business market where there is fierce competition between current mobile carriers.

- 6.36 In the case of new entrants, higher mobile termination rates that fund a greater burden of mobile operators fixed costs can be used to compete vigorously in the retail market place, as new entrants seek to acquire subscribers and build scale. Relatively higher termination rates enable new entrants to reduce subscription fees, which helps to build market share. There is no reason on economic efficiency grounds, why these higher mobile termination rates should be lowered to the rates that other operators have agreed.
- 6.37 This means that using the lowest negotiated rate is likely to penalise new entrants and mobile pure play operators, somewhat arbitrarily, with no economic efficiency gains.

***Danger of outlier mobile termination rate***

- 6.38 Using the lowest rate as a starting point also leaves the Commission open to the prospect of regulatory gaming.
- 6.39 An operator could set up a mobile network of, for arguments sake, one customer, strike a mobile termination rate of 1 cent per minute, and then claim that this should be the starting point for the rest of the industry. If an operator's main focus was on providing fixed to mobile calls, then this would be a rational gaming strategy.
- 6.40 Cable & Wireless Optus understands the Commission is aware of this possibility, and will not allow the process to be gamed in such a manner. However, we alert the Commission to this issue and to not set up incentives for FTM resale operators to game the competitive market system of prices.
- 6.41 In the finalisation of its pricing principles, the Commission should make it clear that the principles guard against such regulatory gaming. This will prevent vexatious and ultimately unfruitful arbitrations.

***The starting point should be a weighted average measure***

- 6.42 To address these concerns with the Commission's recommended starting point, Cable & Wireless Optus recommends that the Commission should recommend a weighted average starting point in its final report. A weighted average measure would have the benefit of penalising new entrants and mobile pure plays to a lesser degree, and would partially address concerns about regulatory gaming and outlier rates being struck. A weighted average starting point would improve economic efficiency and ensure that the historically impressive growth in mobile penetration continues, to the benefit of consumers.

**The weighted average price basket**

- 6.43 Cable & Wireless Optus has concerns about the Commission linking mobile termination rates with retail prices, but if the Commission is minded to proceed, Cable & Wireless Optus believes it should do so with the following principles in mind:

- (a) The weighted average basket cannot include all market behaviour — the basket, by definition, will be imperfect, and the Commission should not seek to extend its scope to include every deal, and every new service over time. Not only is this impractical, it would discourage innovative pricing;
- (b) The weighted average basket should not include ‘on net’ rates, such as Cable & Wireless Optus’ ‘yes’ time, as this discourages efficient network based competition and price innovation that benefits mobile consumers; and
- (c) The glide path should be applied in a forward looking sense — there is no rationale for back dating.

***Measurement of the weighted average***

6.44 The measurement of the weighted average basket is obviously crucial if the Commission is to proceed with its recommended approach. Cable & Wireless Optus believes that the Commission should seek to apply a rigorous and transparent methodology, ensuring that operators’ market behaviour is fully informed. A Working Committee should be established that assists in an open, transparent and expeditious implementation of the methodology.

***The Commission should decide what is included in the weighted average basket, and stick to it***

6.45 In Cable & Wireless Optus’ view, this means that the Commission must, with the assistance of the Working Committee, decide on the make-up of the weighted average basket, and apply that basket over an extended period of time. If the Commission were to constantly change the makeup of the weighted average basket, operators’ ability to compete effectively would be unnecessarily constrained.

6.46 For example, if the Commission observes operators seeking to compete in the retail market place through non-price measures, it should resist the temptation to try to incorporate each of these offers into what would be an ever-changing weighted-average basket. Not only is it open to debate as to how the Commission could sensibly ‘monetise’ certain forms of non-price competition, but the information needed to effectively do this is beyond the Commission’s abilities. For example, how would the Commission value free music downloads from the mobile version of the Napster website via an MP3 plug in device? What valuation would the Commission put on a free offer of location-based services?

6.47 If the Commission were to assume the role of an omniscient regulator, the cost of applying this form of regulation would far exceed any benefits the Commission believes exist. The Commission must not risk exacerbating the information asymmetries that already exist between itself and operators by reserving the right to arbitrarily change the makeup of the basket.

***Industry should be consulted on the make up of the weighted average retail basket***

- 6.48 Industry should be fully consulted and utilized on the appropriate makeup of the weighted-average retail basket, to minimise any market distortions that may arise if the Commission were to develop a basket without sufficient consultation. The Commission will need very detailed carrier information to implement the methodology; therefore it is important carriers are brought into the process so that the information can be practically collected, and the methodology can, in fact, be implemented.

***On net usage rates should be excluded from any weighted average retail basket***

- 6.49 Cable & Wireless Optus believes that the Commission should not include ‘on net’ pricing in its weighted average retail basket. By ‘on net’ pricing, we mean offers such as ‘yes’ time, that are only available to customers on the one network. For example, ‘yes’ time provides free calls between 8–12pm each night, but only to other Cable & Wireless Optus customers. The whole call stays on the Cable & Wireless Optus network.
- 6.50 Cable & Wireless Optus believes that the increased aggressiveness of on net pricing is a vitally important benefit to consumers, and contributes to a dynamically competitive telecommunications industry. In particular, on net pricing enables mobile operators to harness the closed user group nature of callers, and compete with the fixed network incumbent, Telstra.
- 6.51 The Commission would be aware that Cable & Wireless Optus was the leader in developing on net pricing, or social tariffing, as it is often called. On net pricing was developed to build subscriber numbers, and clearly enables consumers to switch their calling from the fixed to the mobile network. Other carriers, such as Telstra have responded with their own “on-net” free calling price offers between 9pm and 5am.
- 6.52 However, if a weighted average basket had existed in 1998, before Cable & Wireless Optus introduced on net pricing, it is very doubtful that it would have developed in the way it has to this point. If an increase in the usage of ‘yes’ time had led to a reduction in the mobile termination revenue stream, Cable & Wireless Optus would have been unlikely to offer the service as it has.
- 6.53 On net pricing competes directly with fixed to fixed calling. If the Commission includes on net calls in its weighted average basket, it will create incentives for such free/cheap calling deals to not be deployed as vigorously, and to be removed. This will substantially lessen competition and competitive constraints of fixed to fixed calling.
- 6.54 The Commission has previously stated that pricing benchmarks should be based on normal retail prices, rather than prices that only apply with certain conditions attached. For example, in its LCS Pricing Principles, the Commission used



Telstra's unbundled local call price as the benchmark, rather than a price that was only offered on the condition that consumer purchase long distance and international services in a bundle.

*"To ensure that an access provider has flexibility to price local call services as local call resellers have, the Commission considers that it should use the access provider's unbundled local call prices as the benchmark retail prices from which to deduct retail costs."*<sup>25</sup>

- 6.55 In the mobile market, the same approach would suggest that on net calls should not be included in the basket, as they are, in a sense, bundled services available only to Cable & Wireless Optus subscribers who call other Cable & Wireless Optus subscribers.
- 6.56 On net calls should not be included in the weighted average basket because they are not actually a voice call in the traditional sense. Due to any-to-any connectivity, when a subscriber makes a normal call, he or she can call anyone on any network, and is charged on that basis. The utility of making that call incorporates an option value that the consumer can call anyone in the country, for example. However, on net calls are quite different in their nature. Subscribers wishing to make on net calls face eligibility conditions that restrict a wider deployment of the free calling option:
- (a) In most cases, they must know the identity of the person they wish to call, and they must know that the person subscribes to the same network. Clearly, some subscribers may inadvertently benefit from on net pricing, but in most cases, on net calls are made with the knowledge that they are an on net call; and
  - (b) Subscribers can, in general, only take advantage of on net call offers at certain times of the day.
- 6.57 For these reasons, we would not expect that on net calls would necessarily be priced at the same rate as off net calls. Neither would we expect that the usage patterns of on net calls, and the prices of on net calls provide a true indicator of the competitiveness of the broader retail market.
- 6.58 As we will argue below, if the Commission were to include on net calls, it will:
- (a) adversely impact new entrants worse than other players;
  - (b) substantially lessen competition between MTM and fixed to fixed calling;
  - (c) reduce growth in mobile penetration;
  - (d) undermine investment incentives;

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<sup>25</sup> ACCC, LCS Pricing Principles – Final Report, p. 27

- (e) prevent continued innovative pricing;
- (f) lead to less efficient utilisation of the network;
- (g) reduce consumer welfare; and
- (h) be inconsistent with the ACCC's approach in other areas.

***The inclusion of on net pricing offers in the weighted average retail basket would reduce network based competition***

- 6.59 If the Commission were to include on net pricing in its basket, a number of problems would arise.
- 6.60 Operators may be forced to withdraw their on net pricing offers. This is because a zero price offer induces consumers to utilise the service far more than if a price, even a low price, were attached to the service. As lower spend consumers increasingly take-up mobile services, usage of on net pricing will increase, meaning operators would not be able to sustain the offer — because mobile termination fees will be artificially lowered by the rise in on net free calling during off-peak periods.
- 6.61 The level of network based competition would fall. On net pricing is an efficient way for operators to harness the positive network effects that come with adding subscribers, and especially closed user groups, to their networks. On net offers are very attractive when the number of subscribers is large. However, on net offers also give new entrants a valuable way to build subscriber numbers and loyalty, through targeting closed user groups. One.Tel has offered on net pricing of zero to other One.Tel customers 24 x 7, in an effort to build its subscriber numbers.
- 6.62 If the Commission were to include on net pricing in its basket, One.Tel would be penalised with each new subscriber it signed up, as their usage of its on net offer contributed to a decline in its weighted average basket. One.Tel would be forced to withdraw its offer, reducing the competitiveness of the mobile market.

***Inclusion of on net pricing reduces competition against fixed networks***

- 6.63 As previously discussed, if on net pricing is included in the Commission's basket, it will create incentives for on net pricing to be scaled back. On net pricing compete against fixed to fixed network calling. For example, Cable and Wireless Optus "yes.time" deal competes against Telstra's fixed to fixed \$1.98 all you can talk deal. If mobile operators scale back on net pricing competition against Telstra in fixed to fixed calling will be reduced.

***The effect of data on a weighted average price basket***

- 6.64 If the Commission is seeking to minimise the economic distortion of its weighted average retail basket, it will need to incorporate data services in its

measure. If data services were not included, operators may have the incentive to compete vigorously on data prices, while pricing voice services more conservatively, distorting consumer behaviour.

- 6.65 While Cable & Wireless Optus supports the inclusion of data services in the weighted average retail basket, it is important not to include them too soon, as operators' incentive to innovate and introduce new services will be diminished. In addition, the inclusion of data in the basket is complex, as there are a range of ways that operators will charge for data services. If the Commission does not include data services on a reasonable basis, the market could be distorted. As previously discussed in relation to 3G, the relative incremental costs of data/voice services will be substantial. The costs of data will substantially reduce, while the costs of voice will relatively increase. Therefore, inclusion of data, without correct adjustment for this technological cost changes, will result in less efficient incremental pricing of voice and data services on 3G networks.
- 6.66 At present the most widely-used data application is the short message service (SMS), a text based service. As argued earlier, SMS is an effective economic substitute for voice services, as consumers have the incentive to switch from short conversations to SMS, as it is cheaper. If SMS were excluded from the basket, operators may have an incentive to encourage this economic substitution through lowering SMS prices.
- 6.67 Including basic data services such as SMS in the Commission's weighted average basket is a reasonably simple matter of tracking the price per message weighted by the number of messages. However, new data services may be more difficult to incorporate into the basket. For example, location based services, where consumers may be sent information which is valuable to them because of where they are, may be funded by charging both the consumer, and charging third parties who want to deliver location dependent information.<sup>26</sup> If the charges to third parties were to fall, would that be incorporated into the basket? Examples such as this demonstrate why the Commission must think carefully about the makeup of its basket, and consult industry extensively in its application through a ACIF/Working Committee type process.
- 6.68 If new data services are included, the Commission must be careful to include them in a way that does not inhibit their development. New data products may be launched initially at higher prices, and then when mass-market penetration is achieved and economies of scale realized, prices are reduced. Other products can be launched at zero prices, to get people using the product on special offers (such as SMS). Prices are then increased once consumers have adopted the new product. Demand is uncertain for a lot of new products, and quite often price is reduced where demand is higher than expected and greater economies of scale are realized. Should operators be penalised for utilising this product life cycle approach to pricing? If the Commission included the launch prices and then

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<sup>26</sup> An example of this is where consumers subscribe to a service that tells them about clothes sales as they walk by stores. The consumer will likely pay a per month subscription service, but the mobile operator will also charge the store owner a fee for this targeted advertising service.

compared them to prices down the track, then operators may be penalised. The Commission may give some thought to including data services only once they achieve certain volumes and price stability, to guard against this.

- 6.69 The Commission should also be aware that data services are likely to be charged through a variety of ways. SMS is charged per message, WAP services are charged per minute. With the introduction of GPRS technology, operators will be able to charge based on megabits, or through an 'always on' approach, similar to high speed internet in the fixed market. The Commission needs to work carefully with industry in seeking to incorporate these methods of charging so as to minimise any economic distortions that may otherwise arise.

### **Handset quality should be taken into account**

- 6.70 The Commission states that it will include access fees in its basket, which in part takes into account handset subsidies. However, the Commission should be aware that handset subsidies are recouped via subscription charges in the post-paid market, and can be recouped by call charges in the pre-paid market. Given that the consumer base on average is rapidly changing, with greater take-up of cheap pre-paid handsets amongst the late adopters of mobile technology, it is important the Commission adopts a mobile handset quality index in the implementation of its pricing methodology. Otherwise reductions in average handset quality may be mistakenly assumed to be a reduction in the average price of mobile subscription.

### **The introduction of mobile number portability (MNP) could skew the weighted average basket, as price dislocation is expected**

- 6.71 The Commission should be careful in its application of the glide path not to include one off price dislocations that may occur from time to time. A prime example is the introduction of MNP. Price competition is likely to be temporarily vigorous at this time (and unrepresentative of long-run equilibrium values). It is unlikely this temporary surge of promotional and special offers will be sustained at that rate for a prolonged period of time. If the Commission were to measure the basket from, say September 2000 to September 2001, it would likely find a very steep decline, as MNP starts in September 2001. Similarly, if the Commission's end date for measurement was the Christmas period, price competition would also be very aggressive. However, these two examples of price dislocation should not be allowed to skew the basket.
- 6.72 Cable & Wireless Optus suggests that the Commission reviews the weighted average retail basket on an annual basis, from June 30 to June 30, which will help to alleviate these problems.

### **New entrants must be included in the glide path**

- 6.73 Cable Wireless Optus understands that the Commission proposes to apply the glide path consistently across industry, and supports this. If the Commission

were to exclude new entrant networks, competition would be distorted, to the detriment of more established operators.

- 6.74 For example, if a new entrant were not subject to mobile termination regulation, it could compete very vigorously at the retail level in the knowledge that its termination revenue stream would remain immune from Commission regulation. Other operators would be unable to fully effectively respond to this new entrant pricing. This is because if competitors were to respond to the new entrants pricing offers, they would be penalised in the form of lower termination rates (that violate Ramsey efficient cost recovery rules), reducing their ability to compete effectively against new entrant able to freely configure Ramsey efficient mobile packages.
- 6.75 This would have the effect of transferring subscribers to new entrants over a period of time, on no other basis than a regulatory distortion to competition.

#### **The glide path should be forward looking — should not backdate**

- 6.76 The stated intention of the glide path is to ensure that the benefits of intense retail mobile competition flow through to fixed to mobile users in the form of lower mobile termination rates in the future.
- 6.77 The key point here is that the glide path is necessarily forward looking. Consumers can only benefit from the glide path in the future, as prices fall.
- 6.78 If the Commission were to apply the glide path retrospectively, consumers would not benefit at all. Fixed to mobile consumers have already paid their bills over the last year and a half, and would not benefit if the provider of their fixed to mobile calls was granted a back-dated lower mobile termination rate.
- 6.79 The only parties to benefit from backdating the glide path are the fixed to mobile arbitrage-based resellers currently arbitrating against the facilities-based mobile carriers. These facilities-based carriers have produced large and innovative benefits to consumers through their substantial and risky investments, as demonstrated by the CRU report showing increases in consumer surplus of \$3 billion per annum in 19992000. A decision to backdate would be a decision to transfer money from these risk-taking mobile carriers to the arbitrage-based resellers. This would not produce any competitive benefit to consumers at all.

#### **CDMA must be treated on an equivalent basis to GSM to satisfy the Commission's technology neutral criteria**

- 6.80 The Commission notes that only the GSM termination service is currently declared, meaning that the Commission only has the power to regulate GSM services. That is, the Commission does not have jurisdiction over CDMA termination<sup>27</sup>. In particular, the Commission notes:

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<sup>27</sup> The Commission will in any event need to review its current declaration because from 1 September 2001 the Commission will not have jurisdiction over certain GSM services that have been ported from CDMA services.

“The issue of control over access and consumer ignorance (which allow mobile carriers to sustain high access prices), however, may equally apply to other mobile termination services. It may be appropriate, therefore, to extend the GSM service declaration so that it also applies to other mobile technologies.”<sup>28</sup>

- 6.81 This raises a very serious issue — proceeding with the application of the Commission’s proposed pricing methodology prior to applying the same methodology to CDMA mobile network operators’ risks distorting the mobile market.
- 6.82 The distortion is clear. If the Commission’s analysis of the GSM mobile market holds, then we would expect that non-regulation of the CDMA market would mean that CDMA mobile termination rates remain free of regulation, while GSM termination rates will be artificially changed by the Commission’s regulatory intervention. This enables CDMA network operators to compete more vigorously for new subscribers using Ramsey efficient pricing structures, and with a greater commercial freedom and flexibility than GSM operators who would be required to maintain a constant retail/ mobile termination ratio through time.
- 6.83 This clearly distorts the mobile market in favour of the CDMA network — directly contravening the Commission’s competitively neutral principles of competition policy. Policy should be introduced that promotes the process of competition, not particular competitors or particular choices of technology. For example, consider Telstra, which has both a CDMA and a GSM network. Suppose the Commission applies its pricing methodology to Telstra’s GSM network but not its CDMA network. Telstra would clearly have the incentive to more vigorously add subscribers to its CDMA network, rather than its GSM network, as its CDMA termination revenue stream will be able to more efficiently reflect Ramsey efficient pricing structures through time. Indeed, Telstra could be expected to offer incentives to its current GSM subscriber base to switch to the CDMA technology in an attempt to avoid the Commission’s pricing methodology.
- 6.84 Cable & Wireless Optus does not support the extension of price regulation to CDMA networks. In fact, Cable & Wireless Optus has written to the Commission suggesting the GSM service should be undeclared to, in part, address the technology neutrality issue between CDMA and GSM networks. However, if the Commission proceeds with its recommended pricing methodology, it must do so in such a way that does not favour one technology over another.
- 6.85 Cable & Wireless Optus recommends that the Commission not proceed with its pricing methodology until it is able to apply the methodology to the CDMA networks. While this will lead to a delay in the application of the pricing

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<sup>28</sup> Commission, 2000, p. 53

methodology, it is essential that the Commission apply its methodology even handedly.

## 7. The way forward

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- 7.1 While Cable & Wireless Optus has advised the Commission on how it should apply its recommended pricing approach, we remain of the view that the first best policy is regulatory forbearance.
- 7.2 If the Commission is sufficiently concerned about the distortionary impact of its proposal, but is not minded to forbear from price regulation, Cable & Wireless Optus would suggest an alternative approach — a non-discrimination rule between the commercially negotiated rates between mobile operators and the rates offered fixed networks. Resellers of the fixed to mobile call case would be offered a weighted average of the carriers rates for mobile termination negotiated with other mobile carriers. In this way, FTM resellers would be provided with fair and non-discriminatory interconnection charges.
- 7.3 As the Commission, and more importantly its economic consultant, have concluded, MTM interconnection rates are likely to be negotiated to reasonably efficient levels. Currently there are no problems in commercial negotiations between mobile operators as evidenced by the non-existence of Part XI C arbitration disputes amongst such operators. Hence, benchmarking FTM termination rates against a weighted-average of these charges will also mean resellers will have access to these reasonably efficient interconnection charges negotiated between MTM operators. This will also enable mobile operators, amongst themselves, to maintain the current tariff diversity that helps differentiate products at the retail level to the benefit of consumers — more choice is good.
- 7.4 This non-discrimination rule ensures that mobile operators offer a weighted-average mobile to mobile rate to fixed network operators. In this way, it is not possible for mobile operators to agree low rates amongst themselves without passing on the benefits to fixed networks, which ensures that competition in the mobile market flows through to the fixed to mobile market.
- 7.5 The non-discrimination rule would also be reasonably practicable and uncomplicated for the Commission to implement. In the absence of forbearance, this approach is recommended to the Commission.