

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



**Telecommunication Act 2001: Schedule 3 Investigation into  
Regulation of Mobile Termination Access Services**

**Cross-submission**

**18 August 2009**

**[PUBLIC VERSION]**

## **CONFIDENTIALITY**

Confidentiality is sought for that information included in square brackets in the confidential version of this submission and designated as VNZCOI (Vodafone – designated Commission Only Information) or VNZAPI (Vodafone - designated Additional Protection Information) pursuant to the Commission's confidentiality order dated 6 November 2008.

We are providing you with this information on a strictly confidential basis. The information is highly confidential and commercially sensitive to Vodafone because it is not generally known to our competitors. If this information were to be made available, it would unreasonably prejudice the commercial position of Vodafone. This highly sensitive pricing information must be protected from disclosure to protect Vodafone's commercial position.

Accordingly, for the reasons set out above, this information should not be made available pursuant to any request made under the Official Information Act 1982.

Should the Commission decide to make the information available following a request, despite the reasons set out above, please provide Vodafone with not less than three working days notice so that it has the opportunity to seek to protect its position.

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## ***Executive Summary***

1. Vodafone welcomes the opportunity to provide a cross submission in response to submissions made by other parties to the Commerce Commission's Draft Report in relation to the Schedule 3 investigation into mobile termination access services (**MTAS**).

### ***It's time to look at the facts***

2. Through much of this year, mobile termination rates and the state of competition in the retail mobile market have been the subject of an intense series of media and PR campaigns. New Zealanders have been told that the telecommunications market in New Zealand is fundamentally broken, and that mobile termination rates are the cause of this problem. New Zealanders have also been told that our mobile termination rates are "the second highest in the world"<sup>1</sup>.
3. Five years ago, these arguments might have had more credibility. New Zealand had only two mobile network operators using incompatible network technologies; we were worst in the OECD's retail benchmarking for the medium and high user groups; and 28<sup>th</sup> out of the 30 for the low user group. At the time, mobile termination rates in New Zealand were 28cpm.<sup>2</sup> There was clear room for improvement.
4. Today, the story is different. 2degrees has just launched its network; Telecom has launched its GSM-based XT network; Vodafone has six individually-branded mobile virtual network operators (MVNOs) selling services using access to its network (with another to come later this year); and Telecom has an MVNO on its network. That's a total of 10 individually-branded current mobile services providers and at least one other on the way.
5. Against OECD benchmarking, the Commission recognised that New Zealand reached the top half in all three user categories in February 2009. The plans that are ranked as some of the best in the world by the OECD – now referred to as EasyPlans – have recently been further improved compared to prices available earlier this year. The Commerce Commission itself now recognises that these plans are legitimately available to consumers.
6. More importantly, the average revenue we receive per minute of voice calls has plummeted by 55 per cent since 2004-05 such that Vodafone New Zealand consumers pay, on average, less for voice calls in 2008-09 than in any of our operating companies in [ **VNZCOI**. Similarly, data outlined in this submission shows the average revenue

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<sup>1</sup> See, Computerworld NZ, *Youth won't move "off-net", says 2degrees CEO*, Stephen Bell, 27 May 2009, p. 15 at <http://computerworld.co.nz/news.nsf/netw/5DFAEB6A7967C759CC2575C200748DA0>.

<sup>2</sup> See, Commerce Commission, *Draft MTAS report*, 28 July 2009, at Table 40 on p. 148.

we receive per SMS is clearly the lowest of any of these countries, and has fallen by 75 per cent since 2004-05. The volume of calls and SMSs made by consumers has also increased rapidly over this period.

7. At the same time, investment in 3G network infrastructure means Vodafone New Zealand now has 3G network coverage to a greater proportion of the population than our operating companies anywhere else in the world. All of this has been achieved in a country with less GDP per capita – and hence less income to spend on justifying such investment – than many other countries in the world.
8. Consumers can also now easily move between mobile networks. Consumers don't have to pay to remove their SIM-cards from their mobile phones as they do in the UK, Australia and Ireland; all three mobile network operators in New Zealand use the same GSM-based technology so consumers can easily take their phones from one network to the other (or simply swap their SIMs); and porting times between networks are some of the quickest in the world.
9. Finally, mobile termination rates in New Zealand are not the second highest in the world. This is simply a lie. In New Zealand, mobile termination rates are [ ] **VNZAPI** for 2degrees to terminate calls on Vodafone's network and 15cpm (charged on a minute plus second rounding basis) for [ ] **VNZAPI**. This equates to approximately [ ] **VNZAPI** for 2degrees, and 7.55 euro cpm for [ ] **VNZAPI** using 10-year average exchange rates<sup>3</sup>. The European Commission (EC) has only recently noted that:

*Mobile termination rates varied widely in the EU in 2008 from 2.00 euro cents per minute (in Cyprus) to 15 euro cents per minute (in Bulgaria). Mobile termination rates (on average 8.55 euro cents per minute)...<sup>4</sup>*

10. Anyone who is able to see the terms of our agreement with 2degrees under the Commission's confidentiality regime will see that it is certainly not paying us the second highest rates in the world. They will also see that comparisons around 20 second call lengths in a minute plus second rounding scenario are not [ ] **VNZAPI** for it, as it pays Vodafone [ ] **VNZAPI**.

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<sup>3</sup> The 10-year average exchange rate on 17 August 2009 was 1.997. This was calculated using the OANDA website previously relied upon by the Commission for estimating 10 year average exchange rates at <http://www.oanda.com/convert/fxhistory>

<sup>4</sup> See Telecoms: Commission acts on termination rates to boost competition, at <http://www.europe.xorite.com/0,3,Telecoms-EC-Acts-on-Termination-Rates-to-Boost-Competition,9614.html>

11. Yes, the EC does want to see termination rates come down further by 2012. But this is only a recommendation, and it does not make termination rates suddenly lower around the rest of the world right now. Ultimately, regulators in individual jurisdictions will decide how much they believe termination rates should come down (if at all) over time.
12. One particular new entrant clearly wants consumers to believe they are paying too much for their mobile phone services. Who can blame them? They have sat on the sidelines for years and let the market get away from them. They now need to try to convince consumers to move to their network. The best way to do this is to tell consumers they are paying too much for their calls and texts. We expect this.
13. Best practice regulators and policy makers will see through snappy PR and marketing campaigns though, and look to the underlying facts that demonstrate how the market is actually performing. We are confident the Commission will do this when reaching views on the need for further regulatory intervention in this market.
14. The New Zealand mobile market is not a basket case. It is now beginning to soar. Consumers are already getting some of the best value in the world, and there will be more to come as competition intensifies further. All of this will happen before mobile termination regulation can occur in 2011.

***New Zealand does not want the American mobile phone system where consumers have to pay to receive calls***

15. 2degrees wants to radically change the structure of the mobile market in New Zealand. It realises it has come to the market too late, and will have trouble convincing consumers it has something dramatically different to offer to warrant moving to its network in the numbers it would desire. The easiest way to quickly grow market share in these circumstances is to radically overhaul the way the market works so everyone else also has to start from scratch like it is.
16. This is a clever strategy for its shareholders, but is it such a good strategy for New Zealand consumers? Let's look carefully at 2degrees' vision for the mobile market in New Zealand. It wants two key things:
  - an immediate move to the interconnection regime adopted in the US, where mobile operators pay each other nothing to send calls and SMSs to each other's network. This is referred to as "bill and keep (BAK)"; and
  - a complete ban on on-net price discounting.

17. Each of these proposals has some initial intuitive appeal. However, they also carry some nasty stings in the tail when you look more closely at them. Under bill and keep, mobile operators receive no revenue when one of their customers receives a call or text from someone on another network. This is despite them providing a service – at a cost – that enables their consumers to receive these calls and texts. Without revenue from mobile termination fees to cover this cost, mobile operators must find other ways to recover their costs of providing their consumers with the ability to receive calls and texts on their network. This can be done. However, in countries with BAK, this is done in ways that are not particularly appealing to consumers. For instance, in all of the four countries 2degrees notes operate under a BAK arrangement (the US, Canada, Singapore and Hong Kong), consumers actually **pay to receive** calls made by others to them.<sup>5</sup> This is referred to as receiving party pays (**RPP**), and contrasts with arrangements throughout the rest of the world where only the person who makes the call pays for it.
18. Imagine how you would feel under this system in New Zealand. Whenever a telemarketing agency called you at dinner time to promote a product to you, you would actually have to pay your mobile operator for the privilege of receiving the call. No wonder some businesses are queuing up with TUANZ to support a move to BAK. They can send texts and make calls to consumers at little cost to them, and force consumers receiving the call or SMS to pay for it. Such practices are highly undesirable for consumers, and have led some consumer groups to take court action against their mobile operators for the imposition of charges for unsolicited calls in the US.<sup>6</sup>
19. In the US, consumers also:
- pay to receive calls on both Verizon and AT&T’s networks;
  - pay to receive SMSs on both Verizon and AT&T’s network;
  - face monthly access fees if they are pre-pay customers; and
  - have a credit expiry term of one month if they have a pre-pay top-up of less than \$25.
20. To be clear, mobile termination rates mean consumers do not have to pay to receive calls from those who call them. The mobile operator is able to recover its costs of providing this service by charging a termination fee to the carrier whose consumer calls them. Yes, it is a

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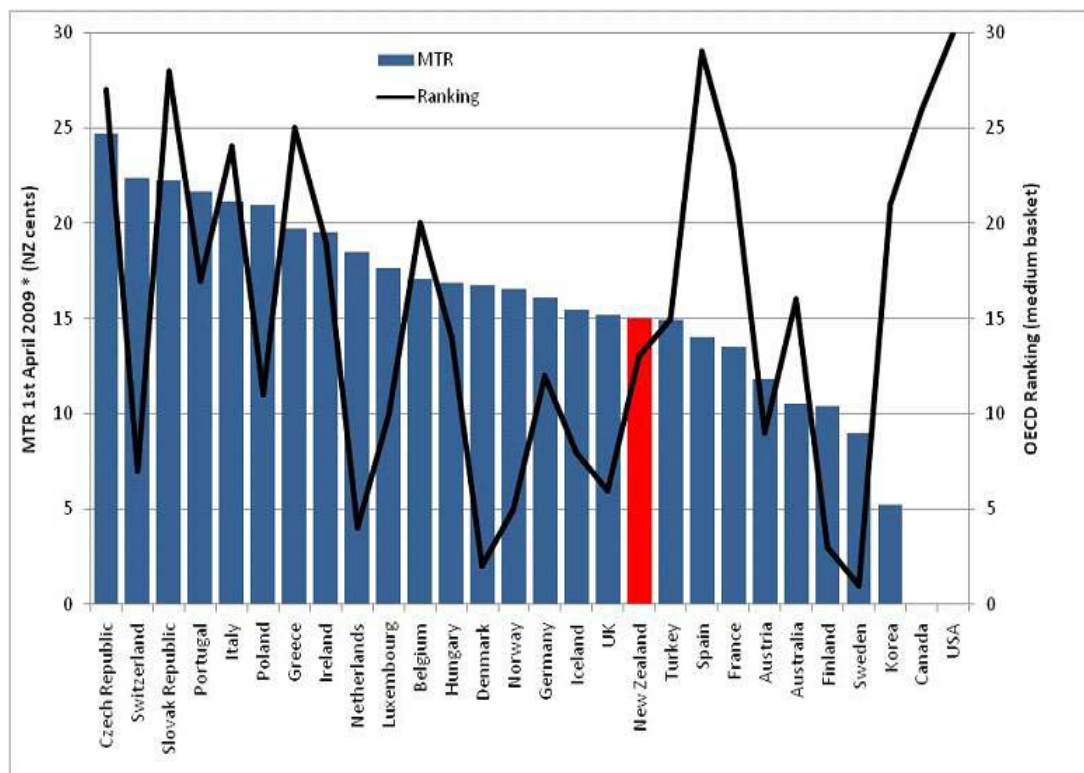
<sup>5</sup> See, 2degrees, *Submission on commerce Commission Draft Report on MTAS*, 28 July 2009, at Table 4 on p. 28.

<sup>6</sup> See RCRWireless News, May 16, 2008. See also: Frontier Economics, *Assessing the impact of lowering mobile termination rates*, July 2008, at p. 2.

hidden fee that the consumer never sees. But it serves an important purpose: it shares the real cost of carrying the call between the two networks involved and it means consumers do not have to pay to receive calls from others.

**Countries with higher mobile termination rates than New Zealand are better OECD performers**

21. As the Commission recognises in its Draft Report, mobile termination is provided in a two-sided market. Implicitly, this means higher termination fees help keep retail mobile phone prices down. This may help explain why the US and Canada consistently perform in the bottom quarter of OECD rankings of retail mobile pricing despite having a BAK interconnection regime.



**Figure 1 – comparison of OECD benchmarking for the medium user group (February 2009) and mobile termination rates<sup>7</sup> in these countries**

22. It is also interesting to note that those countries that perform best in the OECD – such as Denmark, the Netherlands and Norway – have mobile termination rates higher than those

<sup>7</sup> Source of mobile termination rates: i. European MTR rates were sourced from ERG (09) 23 MTR Snapshot – 1 January 2009 from [http://erg.ec.europa.eu/documents/docs/index\\_en.htm](http://erg.ec.europa.eu/documents/docs/index_en.htm). ii. Australian MTR figure obtained from MTAS pricing determination 2009-2011 <http://www.accc.gov.au/content/index.phtml/itemId/848783>. iii. Korean MTR rate is from The Mobile Termination Issues Paper August 2008, The Commerce Commission iv. All rates were converted using ten year exchange rates for the period 15-01-1999 to 14-01-2009, and were obtained from oanda.com

here in New Zealand.

***Slashing mobile termination rates will hurt low-spend pre-pay consumers***

23. The other nasty side-effect of BAK is that it means some consumers who receive more calls and texts than they make will no longer be as profitable to serve for mobile operators. Put simply, if a mobile operator can't receive revenue when its customers receive calls or texts on its network via termination fees, it will not want those customers who receive lots of calls and texts unless it can find another way to recover its costs of servicing these customers. This is especially a concern for low-spend pre-pay consumers, and has been recognised by the UK Competition Commission earlier this year when it categorically rejected arguments for BAK:

*... under [BAK] MNOs would no longer receive revenue from the caller's MNO to cover the cost of terminating M2M calls. This could have a number of detrimental consequences:*

*(a) MNOs may become less willing to serve customers who receive more calls than they make because a [calling party pays] system, combined with [BAK] would make them less valuable. The impact on the pre-pay sector could be significant.*

*(b) ...*

*(c) Alternatively, MNOs may increase the prices of other services or subscription fees. The former is likely to depress the consumption of such services below efficient levels, and the latter is likely to reduce demand for subscription, again with the pre-pay sector likely to be particularly affected.<sup>8</sup>*

24. In turn, this makes mobile phone subscription less attractive for low-spend customers, and explains why mobile penetration levels are much lower in the US than in Europe and Australasia where BAK does not apply. For instance, in the US mobile penetration levels are around 87.1 per cent, while they are generally higher than 100 per cent through Europe and Australasia where mobile termination rates are set.<sup>9</sup>

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<sup>8</sup> UK Competition Commission, *Determination between Ofcom and Hutchison 3G UK Limited and Ofcom and British Telecommunications plc, under section 193 of the Telecommunications Act in regard to Mobile Phone Wholesale Voice Termination charges*, dated 16 January 2009, at para [14.79]

<sup>9</sup> See: OECD, *Communications Outlook 2009*, at p. 134 at <http://browse.oecdbookshop.org/oecd/pdfs/browseit/9309031E.PDF>

***A ban of on-net price discounting will mean the end of BestMate and Family***

25. With regard to 2degrees' other agenda item (a complete ban on on-net price discounting), Vodafone notes this would mean the end of BestMate and Family in New Zealand. These products have provided staggering value for consumers. In particular, data provided in this submission shows that, on average:
- each pre-pay BestMate consumer makes over \$375 worth of calls and texts to their BestMate each month for only \$6<sup>10</sup>; and
  - each hub of 4 Vodafone consumers on a Family package makes over \$390 worth of calls and texts each month to each other for only \$20<sup>11</sup>.
26. These products provide staggering levels of value for consumers, and are driving huge reductions in the average amount consumers pay for calls and texts in New Zealand. It is also ridiculous to claim such offers are anti-competitive for a new entrant. All a new entrant needs to do is attract groups of 2 or 4 consumers to its network to match these kinds of offers. Any new entrant can do that if it is clever enough – and if it has been willing to make the investment in a billing platform that allows it the functionality to provide these kinds of bundled offers to its consumers.
27. It is also noteworthy that on-net price discounting occurs all around the world. Indeed, it occurs in each of the markets 2degrees believes we should replicate where BAK pricing applies.<sup>12</sup>
28. New Zealand does not need blunt policy instruments that ban all types of innovative marketing. It does not need BestMate and Family banned from the market, as 2degrees would prefer.
29. If New Zealand consumers want to pay to receive calls; face shorter credit expiry periods for pre-pay top-ups; and no longer be able to enjoy the benefits of BestMate and Family, this can be arranged. Just sign up to 2degrees' "Drop the rate Mate" campaign and try to apply

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<sup>10</sup> See: <http://www.vodafone.co.nz/plans/prepay/best-mates.jsp>

<sup>11</sup> See: <http://www.vodafone.co.nz/plans/you-choose/vodafone-family.jsp>

<sup>12</sup> In the US, both AT&T and Verizon offer unlimited national mobile to mobile on-net calls to their consumers. See: <http://www.wireless.att.com/cell-phone-service/cell-phone-plans/individual-cell-phone-plans.jsp>; and <http://www.verizonwireless.com/b2c/splash/plansingleline.jsp>. Similarly, in Canada Bell Mobile offers a product similar to BestMate and Family whereby consumers can enjoy unlimited local and long distance calling between members. See: [http://www.bell.ca/shopping/PrsShpWls\\_RtpSharePlans.page](http://www.bell.ca/shopping/PrsShpWls_RtpSharePlans.page)

pressure on the Commerce Commission and the Minister outside the official process to move to this kind of arrangement. We think, however, that New Zealand consumers, regulators and policy makers are smarter than this. We don't believe they want the sting in the tail 2degrees isn't telling you about.

***The Commission is heading in the right direction with its principles – it's just got its numbers wrong***

30. We believe the Commission has got its principles right in its Draft Report. It correctly finds that:

- the price of mobile termination should be based on cost, rather than free under BAK;
- that there is no need for broad-brush “no discrimination” rules that prevent on-net price discounting, provided mobile termination rates reflect cost; and
- regulatory intervention should only occur when the benefits of doing so for consumers outweigh the detriments such regulation will cause.

31. Where we take issue with the Commission is its estimations of the cost of mobile termination in New Zealand, and the relative size of the benefits and costs that would follow further regulation.

32. With regard to costs, we are greatly concerned by the Commission's cost estimation technique. For this investigation, it has developed a variation to its traditional technique. Now it simply picks raw cost estimates from nine countries around the world, and picks the middle estimate as a good proxy for costs in New Zealand. The upshot is that New Zealand is assumed to be just like Israel, where the regulator has estimated costs to be 7.2cpm. Any rational person can see New Zealand is nothing like Israel. Any method that says the costs in New Zealand must equal the cost estimate from Israel is clearly questionable.

33. The Commission's method has also been roundly criticised by a range of experts on this matter, including Analysys Mason<sup>13</sup> which has constructed 7 of the 9 cost models relied upon by the Commission in its benchmarking analysis. In this regard, Analysys Mason notes that:

*The Commission's benchmark analysis of MTAS costs is simplistic and produces a result that risks being inaccurate.*

and

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<sup>13</sup> See Analysys Mason, *Assessment of the position of the Commerce Commission of New Zealand in determining MTAS prices*, 27 July 2009.

... we believe the approach taken by the Commission to estimate the MTAS cost for New Zealand is flawed.

34. We believe that if the Commission applied its previous methodology properly, it would get an estimate of the cost of mobile termination of 14.3cpm.
35. With regard to the positive effects of regulation, the Commission assumes FTM pass-through will be somewhere between 85 and 100 per cent once it starts regulating. That is, for every cent reduction in FTM termination rates, the Commission assumes consumers will enjoy FTM price reductions of between 0.75cpm and 1cpm. Such assumptions are not supported by evidence from New Zealand or overseas. Recent data released in Telstra's Annual Report<sup>14</sup> shows the level of pass-through under regulation in Australia over the last 5 years has been **only 16.6 per cent**. Indeed, Telstra is now starting to raise FTM prices rather than drop them for consumers. FTM regulation certainly has not applied competitive pressure on Telstra to drop its retail FTM prices. This has contributed to the ACCC's recent decision to stop dropping mobile termination prices further in Australia. Importantly, the Commission's cost-benefit model shows that if pass-through drops below 64 per cent, consumers will be better off with the initial undertakings provided by Vodafone and Telecom than with regulation.
36. In New Zealand, the situation is different because under the MTR Deeds provided by Vodafone and Telecom to the Crown in 2007, all reductions in termination rates are guaranteed to be passed-through **in full**. So, every dollar of reduced termination rates goes straight through to consumers. This obligation will fall away, however, if the Minister accepts a recommendation to regulate by the Commission. Then, we are left to how much the market will pass through. Historically, Covec estimates that pass-through has only been around 40 per cent in New Zealand prior to the introduction of the MTR Deeds<sup>15</sup>.
37. Incredibly, parties other than Telecom and Vodafone have only been passing through at about 30 per cent of reductions in FTM termination rates in New Zealand over the last couple of years. That is, in competition with market leaders Vodafone and Telecom who have both met their obligations to pass through in full, smaller operators have pocketed 70 per cent of their savings and not passed it through to consumers. This adds to a disturbing trend in New Zealand in recent years. While termination rates have fallen from 50cpm in 1998 to 15cpm today, fixed-line operators have (based on the Commission's estimates<sup>16</sup>) increased their margins from 6cpm to 13.96cpm. Under the Commission's projections for pass through under

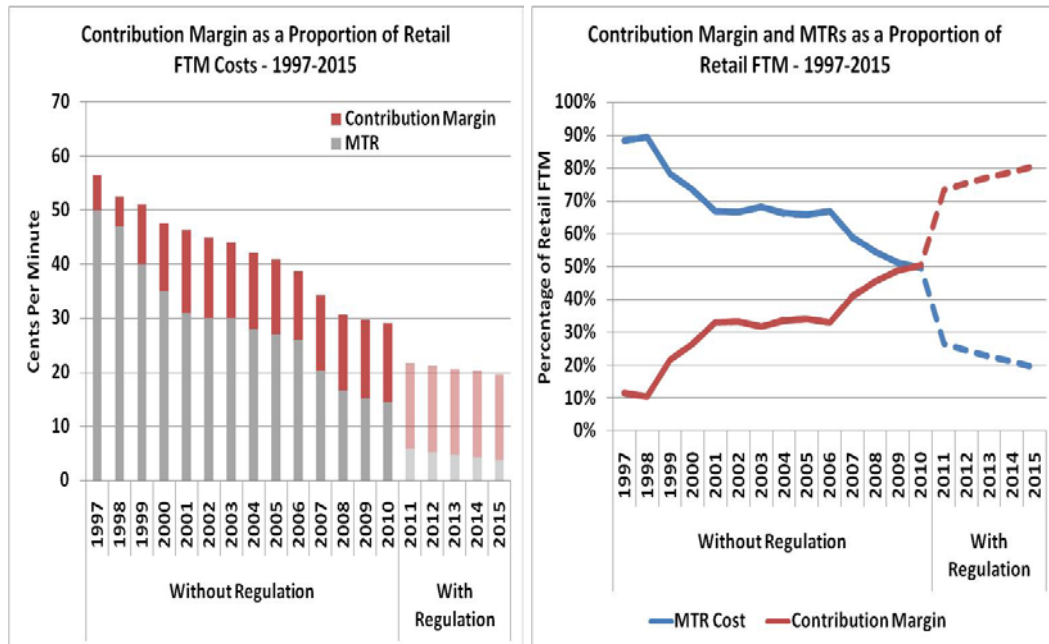
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<sup>14</sup> Telstra Corporation Limited Financial Results for the year ended 30 June 2009, 13 August 2009. Data relating to FTM call revenue and volumes can be found in the tables on page 39 and 40 of this report.

<sup>15</sup> Covec, *MTAS Regulation Quantitative Analysis*, 27 July 2009, at para [14] on p. 3.

<sup>16</sup> See Commerce Commission, *MTAS Draft Report*, Table 40 on p. 148.

regulation, this is expected to get even worse such that fixed-line operators will grow their contribution margins to over 80 per cent by 2015.



**Figure 2– Comparison of falling FTM mobile termination rates over time with growing fixed-line operator margins**

38. TUANZ often talks about the “rort” that is mobile termination rates. We think the rort is actually with the fixed-line operators rather than the mobile operators. Fixed-line operators are happy to take massive reductions in mobile termination rates and keep the vast majority of it for themselves.
39. The Commission keeps saying that we can expect high levels of pass-through from reduced termination rates. It said this would occur during the last investigation if termination rates dropped immediately to 15cpm. Well, FTM termination rates are now at 15cpm and smaller fixed-line operators who are not subject to pass-through commitments are only passing through around 30 per cent of reduced FTM termination rates.
40. The Commission is now saying 85 to 100 per cent pass-through will occur if termination rates drop immediately to 5.8cpm if it starts regulating in 2011. But the evidence – both here and overseas – shows that reductions in FTM termination rates simply don’t lead to large amounts of pass-through unless there is some kind of pass-through commitment like those contained in the existing MTR Deeds.
41. The Commerce Commission is increasingly being made to look like Rachel Hunter in the famous Pantene shampoo commercials. Reducing FTM termination rates further “won’t generate 100 per cent pass through overnight, but it will happen”. Perhaps it believes if it

reduces them one more time, 100 per cent pass-through will finally happen. It has not in the past when decreases have been at their greatest; it won't going forward when decreases will be smaller.

42. The ACCC has woken up to this con-job and decided not to force lower reductions in FTM termination rates. It is about time the Commerce Commission did the same here in New Zealand and allowed the current arrangements – with their 100 per cent pass-through guarantee – to continue to ensure all reductions in FTM termination rates in the next few years are fully passed-through to consumers.
43. In its analysis, the Commission rightly notes that reductions in termination rates can have detrimental consequences for mobile consumers. As mobile operators earn less revenue from termination, they need to find other ways to recover revenues. As a result, we can expect that reduced termination rates will lead to pressures for mobile operators to either:
- increase certain retail mobile prices (or reduce the extent to which price decreases will occur);
  - introduce more restrictive minimum monthly top-ups or faster credit expiry periods for pre-pay consumers; or
  - reduce the extent of handset subsidies provided to consumers.
44. We believe the Commission has undersold how significant these detrimental impacts will be. While it recognises a move to BAK might have such effects<sup>17</sup>, it does not appear to recognise how significant these effects would be if it slashed termination rates by around 60 per cent under regulation.<sup>18</sup> Rather, it assumes mobile operators will simply absorb anywhere between 50 and 100 percent of lost revenues, and have only minimal responses in the retail mobile market.<sup>19</sup> We do not agree with these views. You can't take over \$300 million of revenue out of a business over the next five years (as would occur for Vodafone under the Commission's proposed regulation) without expecting mobile operators to respond in some way that seeks ways to recover lost revenues from mobile consumers. Shareholders' reasonable required returns cannot be expected to diminish. Indeed, with continued (and, in the case of New Zealand, unpredictable) regulatory intervention, one might expect the investments to be seen as more risky and therefore requiring higher returns over time.

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<sup>17</sup> See Commerce Commission, *op. cit.*, at pars [408] – [409] on p. 104.

<sup>18</sup> That is, under regulation, the Commission is proposing an immediate drop in termination rates from 14.4 cpm in 2010 to 5.8cpm in 2011. For SMS, it is proposing a drop from 9.5cpm to 0.95cpm in the same period.

<sup>19</sup> See, Commerce Commission, *op. cit.*, at para [xxxvi] on p. 16.

### ***The right solutions are already in place***

45. Mobile termination is already quasi-regulated in New Zealand. FTM termination rates are governed by the terms of the MTR Deeds that were provided to the Crown in 2007. These are similar to undertakings, and include requirements to reduce mobile termination rates until 2012. They also ensure Telecom and Vodafone will pass through all the reductions in mobile termination rates they receive to their consumers under these arrangements.
46. For mobile to mobile termination, Vodafone has entered into a special deal with 2degrees that provides highly favourable terms to it. While we are happy for the terms in this arrangement to be made available to the public for consideration, 2degrees consistently wants to hide these rates from the public. That is its choice. However, anyone who is able to access the terms of this agreement under the Commission's confidentiality regime will be able to see how favourable to it these terms are. They will also be able to see the terms do not match 2degrees' hyperbole about the high termination rates they claim exist here in New Zealand.
47. As indicated in our submission to the Commission's Draft Report, Vodafone is now prepared to extend the terms of this agreement to any other new entrant to the mobile market. We believe the rates for mobile-to-mobile termination in the 2degrees deal ensure there is no barrier to a new entrant coming into the market in New Zealand on account of termination rates. Mobile operators all around the world have entered and prospered in the face of higher termination rates than those available to all new mobile entrants on our network. They have also done so when on-net price discounting exists.

### ***A final word on undertakings***

48. The Commission has stated that it has a preference for commercial solutions.<sup>20</sup> In the context of the MTAS investigation, use of the undertakings process is the mechanism by which such commercial solutions can be tabled by access providers.
49. Vodafone thinks it would be fair to suggest that the Commission and the industry are still exploring how best to run the undertaking process under the Telecommunications Act. This is only the second Schedule 3 investigation to include undertakings and the first one (in relation to national roaming) did not result in an undertaking being accepted.
50. Despite providing a draft recommendation in its Draft Report, the Commission has not finalised its views on key assumptions and parameters in relation to its cost benefit analysis. These assumptions and parameters have proved contentious, and have been the subject of

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<sup>20</sup> See for example, Discussion Paper of the Commerce Commission "A Guide To Regulatory Decision Making by the Commerce Commission for the Telecommunications Sector", 31 July 2009, para [152]

various submissions and often conflicting evidence, provided by many parties. The Commission's final determination on these points will be crucial in informing the factual of regulation.

51. This means that when considering what outcomes might be a better alternative for consumers when compared to the factual of regulation, access providers at present have no certainty. Without having a defined final view on the factual of regulation, access providers will be shooting in the dark when trying to formulate an outcome which might better regulation.
52. If the undertakings process is to be given the proper chance to succeed it deserves, access providers must be provided with the Commission's final views on key assumptions and parameters, as part of a full cost benefit analysis, for all services. This must be done before the Commission closes the door on any final undertakings. This is preferable to offers being made after the final report stage which, under the present process, is the first time the Commission will be allowing parties to have sight of how it intends to determine these key issues. It is only after such views have been provided that access providers can have any certainty that the goal posts have been fixed by the Commission, and therefore consider whether they are in a position to offer undertakings which can better this factual.
53. Without the Commission finalising its views and providing full cost benefit analysis for all services, access providers have no firm yardstick to measure against, when considering revising undertakings. Any other approach risks the Commission moving the goal posts after undertakings have been provided, which risks undermining the undertakings regime. We do not consider the current process adopted by the Commission is fair to access providers, and will write separately on this matter.

## 1. Introduction

54. Vodafone welcomes the opportunity to provide submissions in response to the views put forward by other parties in their submissions to the Commission's draft report in relation to the Schedule 3 investigation into mobile termination access services (**MTAS**).

55. Our submission responds to a number of key themes that are raised in the submissions of other parties. In this regard, our submission is structured so that:

- **Section two** demonstrates that the **retail mobile market** is becoming highly **competitive**, in contrast to the views expressed by 2degrees and Concept;
- **Section three** responds to the arguments of 2degrees, Woosh/Kordia and CallPlus around the appropriate **pricing principle** for the MTAS. In this respect we make two key points. First, that cost-based pricing principles have a number of superior properties over bill and keep (BAK). And second, of the cost-based pricing principles open for consideration, total service long-run incremental cost (TSLRIC) clearly meets the purpose set out in section 18 of the Telecommunications Act 2001 (**Act**) better than the pure long-run incremental cost (LRIC) alternative proposed by some in their submissions;
- **Section four** responds to specific arguments raised by 2degrees in relation to the Commission's benchmarking analysis in its Draft Report;
- **Section five** discusses why 2degrees' proposal for a blanket ban on all forms of on-net pricing will cause significant harm for consumers, as it will lead to the removal of products like BestMate and Family from the mobile market. If the Commission has particular concerns about specific on-net price offerings in the market, it should use its powers under the Commerce Act to deal with these concerns rather than using blunt instruments such as the Act;
- **Section six** argues the Commission must consider the interconnection agreement we have entered into with 2degrees (and subsequently offered to any other new entrant to the mobile market) in its consideration of the counter-factual that will apply in the absence of regulation;
- **Section seven** discusses how, in response to TelstraClear's submission, local and international evidence suggests that reductions in FTM termination rates will be likely to have an immaterial impact on competition in the fixed-line market, such that FTM pass-through will be likely to be limited under regulation. It also observes how fixed-line operators have been quietly growing their contribution margins as

termination rates have come down over the years, and should be expected to continue to do so under regulation in the future; and

- **Section eight** provides evidence in response to the submissions of Rhys Smith and TUANZ to demonstrate that the waterbed effect is real.

56. In addition to this, the submission contains an appendix that considers the issue of handover of traffic (**Appendix One**).

57. In support of its submission, Vodafone is also providing reports prepared by:

- **Covec** that responds directly to the Concept Economics (**Concept**) report and the Phoenix research report prepared on behalf of 2degrees; and
- **Professor Ordover** that discusses why it is efficient to include a mark-up above pure LRIC prices for MTAS to help recover the common costs of a mobile network.

58. Vodafone has provided its views in this cross-submission within the limited time made available to do so. The fact that Vodafone has remained silent on an issue should not be interpreted as acceptance by Vodafone of the point put forward by another party or the Commission. Vodafone may still hold views on any matter raised in the submissions which is not specifically addressed in this cross-submission.

## 2. *The retail mobile market is far more competitive than many think*

59. In its cover letter to its submission, 2degrees notes that:

*The telecommunications market in New Zealand is fundamentally broken, and has been for some years now. In previous submissions we highlighted the exceptionally high retail prices and low usage prevalent in New Zealand and here we show how entire segments of the market are completely foreclosed to competition. We show how entrenched incumbents are not competing with each other.*<sup>21</sup>

60. 2degrees' comments about market outcomes in New Zealand are later repeated in its cover letter where it notes:

*The comprehensive breakdown of any semblance of competition in New Zealand, and the harm that it is causing – ie very low usage, very high retail prices and almost no cross-network traffic ... The incumbents have done a very successful job of carving up the market between them and preventing new competition or the prospect of new competition to date.*<sup>22</sup>

61. Similarly, in the report prepared for 2degrees by Concept Economics (**Concept**), it is noted that:

*International comparisons of prices, usage and service rollout, suggest New Zealand has tended to lag the rest of the world. Historically, mobile prices in NZ have been found to compare poorly in international price comparisons. In 2008, the Commission noted that the main mobile plans benchmarked have not changed price in \$NZ over the last 18 months' and that these plans have continued to rank in the bottom quartile of the 30 OECD countries surveyed. In September 2008, New Zealand was ranked 25<sup>th</sup> out of 30 OECD countries in terms of pricing for the medium basket ... Prices for this basket in New Zealand were nearly 150% of the OECD average price.*

...

*... New Zealand mobile usage per subscriber (minutes of usage per subscriber per month) is low by international standards. [TRI,VRI] In Australia average usage is around 107 minutes per subscriber per month, while in the UK it is around 111 minutes per subscriber per month.*<sup>23</sup>

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<sup>21</sup> 2degrees, MTAS: 2degrees response to Commission's Draft Report, 28 July 2009, p. 1.

<sup>22</sup> Ibid., p. 2.

<sup>23</sup> Concept Economics, Report – Assessment of the consumer benefits of mobile termination regulation in New Zealand,

62. Concept further argues that innovation and product development has been sluggish in New Zealand. In this regard Concept notes that:

*Telecom and Vodafone had not completed full 3G technology deployments until very recently (arguably prompted by the prospect of 2degrees' entry), while many other countries have had 3G networks for over 5 years. In countries such as Australia, the UK and the United State, 3G networks were rolled out as early as 2003.<sup>24</sup>*

63. In response to these submissions, Vodafone:

- accepts that there was room for improvement in the retail mobile market when the Commission first commenced its considerations of whether to regulate mobile services in 2004, but that many developments have occurred over the last five years that show the market is not “fundamentally broken” now as 2degrees suggests;
- disagrees that retail mobile prices are exceptionally high as both 2degrees and Concept argue. Instead, we note that our voice revenue per outgoing minute in New Zealand is now lower than that for any of our operating companies in [ ] **VNZCOI**. Our revenue per outgoing SMS is also lower than that in each of these markets;
- concedes that Vodafone New Zealand’s voice usage per customer is lower than that of our operating companies in other countries such as [ ] **VNZCOI**. However, given our voice revenue per outgoing minute is lower than that in each of these countries, this suggests that some other factor must be causing these low levels of usage. As indicated in our submission in response to the Commission’s Draft Report, we believe this is because of free local calling in New Zealand and the exceptionally cheap SMS rates in New Zealand that change consumer behaviour towards consuming more of these substitute services. In this regard, we note that SMS usage per customer in New Zealand is now almost **double** that in any of our operating companies in [ ] **VNZCOI**;
- disagrees with Concept that New Zealand performs poorly in OECD benchmarking exercises. While New Zealand was in the poorest-performing third of the OECD in 2006, we are now clearly around the middle of OECD benchmarking. Indeed, in February 2009, we were in the best performing half of the OECD and our BasePlans were below the OECD average for all categories of users. This has recently been recognised by the Commission;

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pp. 5 – 6.

<sup>24</sup> Ibid., pp. 6 – 7.

- shows that the extent of 3G network coverage on our network in New Zealand is now greater than that in each of our operating companies in Australia, the UK and Ireland. Indeed, Vodafone New Zealand has the greatest 3G network coverage of any operating country in the Vodafone Group. This is evidence that innovation and product development is now world leading in New Zealand, and not sluggish as Concept suggests. This is despite New Zealand having a lower GDP per capita than any of these jurisdictions, and one of the lowest population densities per square kilometer; and
- fundamentally refutes that we have – with Telecom – carved up the market between us and acted to prevent competition or new competition to date. We find this suggestion staggering given we have sold spectrum to 2degrees at a heavy discount; entered into a commercial deal with 2degrees that provides highly favourable terms for MTM voice and SMS termination; reached commercial agreement to facilitate co-location on up to 116 network sites, selected by 2degrees, that it decided not to execute; and entered into a commercial arrangement on national roaming. Not only have we subsidised 2degrees' entry into the market, we have also opened our network to 7 individually-branded MVNOs. Rather than putting its hand out for more regulatory concessions, we believe 2degrees should start competing on its merits and stop trying to undermine the advantages Vodafone and Telecom have developed as a result of actually competing and investing in the market over the last 10 years rather than chipping away for regulatory concessions from the sidelines.

64. Evidence in relation to each of these points is set out, in turn, below.

***We concede there was room for improvement in 2004***

65. The submission of 2degrees suggests that the telecommunications market has been “fundamentally broken” in New Zealand for a number of years. Vodafone concedes that when the Commission first started considering mobile termination rates in 2004, there was room for improvement in the retail mobile market in New Zealand. At that time:

- there were only two mobile network operators in New Zealand, operating on different mobile network technologies;
- there were no MVNOs;

- mobile network penetration was only at 86.9 per cent<sup>25</sup>; and
- New Zealand was the most expensive country in 2 of the 3 OECD retail price comparison baskets.

***The mobile market is very competitive in 2009***

66. Vodafone submits, however, that this is clearly not the case now, as 2degrees' submission suggests. Since that time, a number of changes have occurred that demonstrate the retail mobile market is significantly more healthy than it was in 2004. At a structural level, we now have:

- three mobile network operators (Vodafone, Telecom and 2degrees). All of these operators use GSM-compatible technology, so that consumers can now move more easily from one network to the other;
- 6 individually-branded MVNOs operating on the Vodafone network<sup>26</sup> – including TelstraClear which has recently signed a deal that provides it with bulk national minutes, which allow it significant flexibility to design retail offers;
- another MVNO (Digital Island) operating on Telecom's network; and
- 1 more individually-branded MVNO set to enter the market later this year.<sup>27</sup>

67. In other words, the market has moved from having two providers of retail mobile services in 2004 to one where we now have 3 network operators; 7 individually-branded MVNOs and 1 more to come. The impact of this increased competition is clearly observable. No sooner did 2degrees launch with its mobile network on 5 August, than CallPlus announced its pricing plans to the market.<sup>28</sup> These plans actually offer even better headline rates for consumers than those contained in the initial offering from 2degrees. For instance, under Slingshot "Megatalk" consumers will only be required to pay 25cpm as a flat rate for calls to any mobile or fixed network. Consumers will also have the option of "bolting on" SMS packages, where consumers can acquire 2000 on-net SMS messages a month for \$9.95, or 600 any-net SMS messages for \$12.95. Admittedly, consumers will be required to sign up to a \$20 per month 12 month contract, which makes direct comparison between plans difficult. None-the-less, for many types of consumer, the offerings of MVNOs are likely to be significantly cheaper –

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<sup>25</sup> See <http://213.253.134.43/oecd/pdfs/browseit/9307021E.PDF> at p. 118.

<sup>26</sup> TelstraClear, M2, Compass; Black and White; Callplus and Slingshot.

<sup>27</sup> Orcon was recently reported to be launching its mobile offering within 60 days. See: <http://www.nbr.co.nz/article/vodafone-s-heavy-artillery-callplus-confirms-mobile-launch-orcon-way-107003>

<sup>28</sup> See: <http://www.mobile.slingshot.co.nz/>

and a lot more innovative – than the initial offerings from 2degrees.

68. More broadly, the conditions for new entry are significantly more favourable than they were in 2004 as a result of a number of regulatory, government and commercial activities. In particular:

- mobile number portability was introduced in April 2007 so that consumers can now easily move between networks without having to give up their existing phone number;
- the Commission has made a standard terms determination (STD) in relation to mobile co-location that sets out terms and conditions upon which parties can seek to co-locate on each other's network (to the extent they want to);
- there are now three mobile network operators in New Zealand such that the market for national roaming should be significantly more competitive for any potential new entrant than it was in 2004; and
- to the extent mobile termination rates are perceived by some to be a barrier to entry – an assertion which we strongly disagree with – then any new mobile network entrant can have access to mobile termination on our network on the same terms as the secret deal we entered into with 2degrees.

69. All of these arrangements have clearly been sufficient to see the recent launch of a new mobile network in New Zealand.

70. There have also been a number of significant improvements in retail market outcomes for consumers since 2004. In particular, we repeat our earlier submissions that during the period from 2004-05 to 2008-09, Vodafone's:

- average revenue per outgoing voice minute fell by 18 per cent on average across each of these years (or 55 per cent in total over the entire period); and
- average revenue per outgoing SMS fell by 29 per cent on average across each of these years (or 75 per cent in total over the entire period).

71. At the same time, the volume of calls and SMS rose dramatically over this period. In particular:

- voice usage per customer per annum in minutes grew by 74 per cent; and
- SMS usage per customer per annum grew by 254 per cent.

72. These changes are staggering, and illustrated in Figures 3 and 4 below:

[

]VNZCOI

*Figure 3 – average revenue per outgoing voice minute and usage  
for the period 2004-05 to 2008-09*

[

] VNZCOI

*Figure 4 – average revenue per outgoing SMS and usage for the  
period 2004-05 to 2008-09*

73. We believe these are not the signs of a fundamentally broken market. While there was room for improvement in 2004, the retail mobile market is clearly very healthy right now. Consumers are already seeing the benefit of the changes in the market over the last five years.

74. It is against this more accurate assessment of the market that any consideration of further

regulatory intervention should be assessed.

***Retail revenue per unit of usage for voice and SMS is lower in New Zealand than in our operating companies in [ ] VNZCOI***

75. Vodafone believes that perceptions about retail mobile pricing in New Zealand may be coloured by the situation that existed in 2004-05. At that time, we concede New Zealand consumers faced retail prices for voice services that were, on average, higher than those faced by consumers in some key comparable overseas jurisdictions, such as [

] **VNZCOI**. That situation has greatly changed, however, in the period since 2004. By 2008-09, internal Vodafone benchmarking data shows that our voice revenue per outgoing minute is now **lower** than that which exists in each of these jurisdictions. This is illustrated in Figure 5 below, which shows average voice revenue per outgoing minute in each of these four countries over the period from 2004-05 to 2008-09. To protect confidentiality across these jurisdictions, Vodafone is shown in red, while [ ] **VNZCOI** are not specifically identified:

[

] **VNZCOI**

***Figure 5 – voice usage per outgoing minute in New Zealand, [ ] VNZCOI (New Zealand in red)***

76. With regard to SMS, average revenue per outgoing SMS has always been relatively low in New Zealand compared to the rest of the world. The large reductions in average revenue per outgoing SMS since 2004-05 have seen New Zealand move to clearly be cheaper than each of our operating companies in [ ] VNZCOI, as illustrated in Figure 6 below:

[

] VNZCOI

*Figure 6 – revenue per outgoing SMS in New Zealand, [ ] VNZCOI (New Zealand in red)*

77. Perceptions about retail pricing can be slow to change. Vodafone understands this. We now believe, however, that it is clearly the case that New Zealand consumers are paying some of the best average rates for voice and SMS services in the world.
78. The Commission should have regard to the evidence now before it in relation to how quickly prices are changing rather than listen to the marketing claims of new entrants who are trying to convince consumers to move to their network by creating a perception that prices are very high.

***Voice usage is low in New Zealand, but this is because of free local calling and cheap SMS***

79. The Commission has noted in the past that voice usage is low in New Zealand, and these observations have been repeated by 2degrees and Concept in their submissions. This point is made to suggest that voice prices in New Zealand must be high by world comparisons such that the market needs regulatory intervention.
80. Vodafone concedes that voice usage is low in New Zealand relative to some other parts of the world. Our internal benchmarking data confirms this point. As illustrated in Figure 7 below,

our voice usage per customer lies below that in our operating companies in [

] **VNZCOI**:

[

] **VNZCOI**

*Figure 7 – voice usage per customer in New Zealand, [*  
*] **VNZCOI** (New Zealand in red)*

81. What we do not agree with, however, is the suggestion that this is a result of high retail prices for voice calls in New Zealand. The data provided in Figure 5 above shows this clearly not to be the case, as our voice revenue per outgoing minute lies below that in each of [
- ] **VNZCOI**.
82. Accordingly, we submit another explanation must lie behind this observation. As we submitted in our response to the Commission’s Draft Report, we believe this is a result of the combination of free local calling in New Zealand, and the relatively low retail prices for SMS.
83. In relation to free local calling, Vodafone submits there is nothing we (or indeed the Commission) can do to change this. For so long as local calls are provided free in New Zealand, there will always be a natural bias towards consumers making more calls using landline networks where possible. As our data shows, rapidly dropping retail prices so that voice revenue per outgoing minute drops to levels lower than those in our operating companies in [
- ] **VNZCOI** has two effects:
- it does lead to a strong take-up in mobile voice usage – our rate of growth has been broadly in line with that in those countries where prices are also falling; but
  - it does not lead to New Zealand consumers making more calls using mobile phones than consumers in these jurisdictions.

84. In relation to SMS prices and usage, we believe this is an important factor that the Commission must carefully consider. Figure 8 below shows that SMS usage per customer has risen dramatically in New Zealand in recent years compared to our operating companies in [ ] VNZCOI. SMS usage per customer in New Zealand is now almost double that of the next highest of these three countries:

[

] VNZCOI

**Figure 8 – SMS usage per customer in New Zealand, [ ] VNZCOI (New Zealand in red)**

85. Good competition analysis recognises that where services are provided as compliments, the appropriate assessment of the state of competition over the provision of these compliments is conducted having regard to the bundle of services as a whole. The Commission has clearly recognised in its previous considerations of the retail mobile market that voice and SMS services are provided in the same retail market. Most recently, it has noted that:

*... SMS, MMS, and data services are often sold as part of a bundle of retail mobile services, including mobile-originated calling and subscription services, and therefore, that these services are all provided in the same retail mobile services market. The Commission notes that within the various segments of the retail mobile services market the products offered maintain a degree of substitutability, although the degree of substitutability differs greatly by customer type.*<sup>29</sup>

86. We agree with the Commission that SMS and voice services are provided as part of the same

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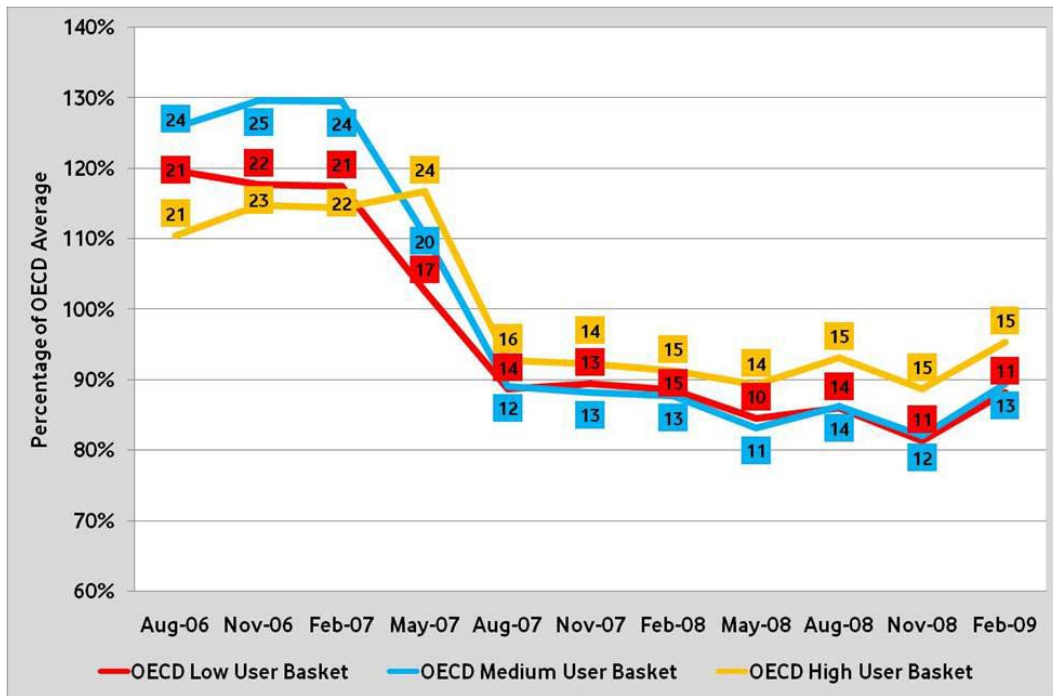
<sup>29</sup> See, for instance, Commerce Commission, *Draft report on whether the mobile termination access services (incorporating mobile-to-mobile voice termination, fixed-to-mobile voice termination and short-message-service termination) should become designated or specified services*, para [145] at p. 53.

bundle of services, and that they are, to some extent, substitutable for each other. To the extent that our SMS prices are some of the lowest in the world and that free local calling exists in the market, it should not be surprising that there is relatively low usage of mobile voice calls in New Zealand.

87. Importantly, we do not believe the aim of regulation should be to ensure New Zealand consumption profiles match those of the rest of the world. We believe it would be overly heavy-handed to intervene in a market simply to ensure voice usage rose to levels observed in overseas countries. If voice prices are low, but usage is not as high as overseas because of cheaper prices for SMS and free local calling, we do not see this as a problem with retail mobile prices.
88. We therefore submit that the Commission must treat with caution claims by 2degrees and Concept in relation to low voice usage in isolation when considering the state of competition in the retail mobile market in New Zealand.

***New Zealand is now in the top half of OECD rankings***

89. It is true that in 2004 New Zealand was one of the poorest performing countries in OECD benchmarks of retail mobile prices. Indeed, in 2004, we were 28<sup>th</sup>, 30<sup>th</sup> and 30<sup>th</sup> out of 30 for the low, medium and high usage baskets respectively.
90. Since then, however, New Zealand's performance in OECD benchmarking exercises has improved dramatically. By February of this year, the Commission recognised that New Zealand was in the top half of the OECD for all three user categories. The trend of New Zealand in OECD benchmarking is demonstrated in Figure 9 below.



**Figure 9 – New Zealand’s performance in OECD benchmarking since August 2006**

91. Vodafone recognises that the Commission has over the years had some concerns about some of the restrictive terms and conditions contained in the earlier periods of the OECD’s benchmarking. For this reason, the Commission chose to amend the OECD’s benchmarking in ways that meant New Zealand was still in the poorer performing half of OECD countries. All such concerns have now been resolved, however, and the Commission now accepts the OECD’s benchmarking without amendment.<sup>30</sup>
92. Vodafone expects it will continue to perform strongly in OECD benchmarking. Recently, Vodafone has improved the terms of the plans that have previously been used in the OECD benchmarking analysis. That is, Vodafone recently moved to introduce Easy Plans to replace its previous Base Plan offerings<sup>31</sup>. In this regard, Vodafone decreased the price of its:
- Easy 20 plan from \$18.95 per month to \$16.95 per month;
  - Easy 60 plan from \$34.95 per month to \$29.95 per month; and
  - Easy 150 plan from \$59.95 per month to \$49.95 per month.<sup>32</sup>
93. Importantly, it is noteworthy that the OECD benchmarking exercise does not enable the

<sup>30</sup> See Commerce Commission, *MTAS Draft Report*, at para [213] – [214] on p. 70.

<sup>31</sup> See <http://www.vodafone.co.nz/plans/easy-plan/index.jsp>.

<sup>32</sup> See <http://forum.vodafone.co.nz/index.php?showtopic=3125>

benefits consumers enjoy from some of our attractive products to be considered in the benchmarking exercise. In particular, the OECD benchmarking does not enable consideration of the benefits of:

- BestMate Prepay – which currently provides around \$375 of value for our consumers each month for only \$6, based on customer usage of this product and standard out-of-bundle calling rates;
- TXT2000 – which provides for \$400 worth of on-net SMS for only \$10 per month;
- Family – which currently provides around \$390 of value for our consumers each month for only \$20, based on customer usage of this product and standard out-of-bundle call rates; and
- TXT600 – which currently provides for \$120 worth of any-net SMS for on-account customers for only \$12.95 per month.

94. Overall, therefore, New Zealand now performs well internationally both in terms of:

- the OECD benchmarking methodology; and
- average retail revenue per outgoing voice minute and revenue per outgoing SMS.

***New Zealand is world leading for product innovation and 3G network deployment***

95. Contrary to the claims of Concept, New Zealand is now world leading in terms of product innovation and 3G network deployment. We now have two fully deployed 3G mobile networks in New Zealand that both cover 97 per cent of the population. In contrast, Vodafone's 3G network deployment is only in the metropolitan areas of Australia and Ireland; and only covers 80 per cent of the population in the UK. Further, 3G network deployment in Australia is limited to two deployments involving significant network sharing.

96. This is significant. At a time when there is consolidation of mobile networks in other significant countries,<sup>33</sup> New Zealand has actually been expanding its level of 3G network

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<sup>33</sup> In Australia, the Australian Competition and Consumer Commission has recently approved a merger of Vodafone Australia and Hutchison. In the UK, T-mobile have appointed JPMorgan to advise on the strategic options for its business after several years of under-performance and it is increasingly likely that Deutsche Telekom will sell the UK business to a competitor in the UK. Without consolidation in the UK market, "more investment in infrastructure is fragmented, and this does not lead to lower prices for customers - just a more inefficient system. Where you have margins in the low 20s [in percentage terms], and for some operators below that, around 9 [per cent] on capital expenditure and add a dash of working capital and there isn't much left. It qualifies for a consolidation case." (Vittorio Colao, CEO, Vodafone Group Plc, as reported by The Times, 25 July 2009:

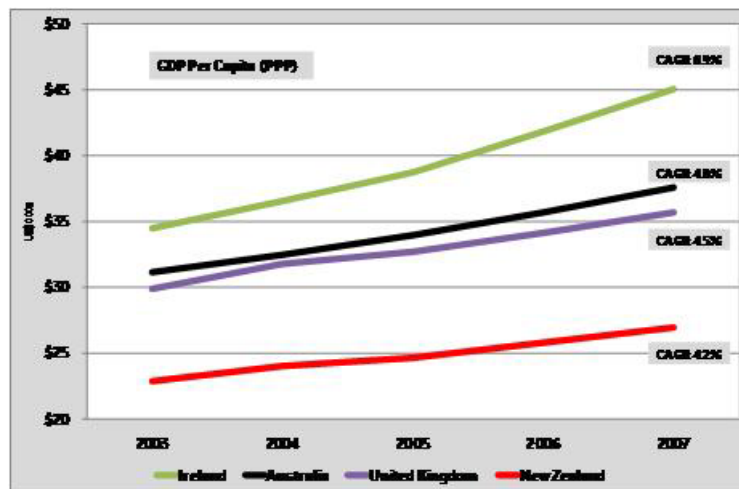
deployment and seen a third mobile operator enter the market.

97. It is even more significant when one considers the low level of population density in New Zealand and the small population and GDP per capita. As set out in Table 1 below, New Zealand seems to be clearly “punching above its weight” in terms of network deployment and innovation. Despite having the lowest GDP per capita of ourselves, Australia, the UK and Ireland, we have the greatest degree of 3G network coverage.

	NZ	AU	Ireland	UK
Mobile Networks	3	3	4	5
Population per Network (m)	1.4	7.3	1.1	123
Population Density (per sq km)	16	3	63	252
3G coverage by population	97%	metro only	metro only	80%
SIM Locking?	No	Yes	Yes	Yes
Porting time	< 3 Hours	< 3 Hours	< 2 Hours	2 Days
GDP Per Capita (US\$, PPP)	\$26,911	\$37,565	\$45,027	\$35,656

**Table 1 – key indicators of network deployment in New Zealand, Australia, the UK and Ireland**

98. GDP per capita is an important indicator, because it is suggestive of the amount of income consumers are able to devote to mobile services, and hence the revenue a mobile operator can expect to earn to recover its investments in network deployment. Indeed, the gap in GDP per capita has been increasing between ourselves and Ireland in recent years, as demonstrated in Figure 10 below:



*Figure 10 – GDP per capita growth since 2003 in New Zealand, Australia, the UK and Ireland*

99. Further, Vodafone has invested in a number of other highly innovative product offerings here in New Zealand in recent years. For instance, in the last two years we launched both:

- Home Phone Wireless<sup>34</sup>, which enables consumers to make local calls using access to our mobile network; and
- Local Zone<sup>35</sup>, which enables consumers to use a single phone as both a mobile phone while they are away from their home and as a home phone when they are at home.

100. Both of these are innovative product offerings that provide greater choice and options for fixed-line and mobile consumers.

***Vodafone has actively promoted new entry by subsidising 2degrees' entry and opening its network to 7 individually-branded MVNOs***

101. Vodafone strongly refutes any suggestion from 2degrees that it has – in concert with Telecom – carved up the market and prevented competition or the prospect of competition to date.

<sup>34</sup> See: <http://www.vodafone.co.nz/home-phone-and-broadband/home-phone-plus/>

<sup>35</sup> See: <http://www.vodafone.co.nz/local-zone/>

102. In the first instance, there has been no suggestion from the Commission that Vodafone and Telecom have acted in a collusive way in regard to retail mobile pricing. Indeed, we believe a close examination of our pricing proposals over the years shows each has tried different pricing strategies to attract consumers to our respective networks.
103. That Vodafone and Telecom have managed to have customer market shares that have broadly stayed in the 40 – 60 per cent range over recent years is more likely to be indicative of strong competition between the two operators than market sharing. Where churn and product innovation/differentiation is strong, yet market shares have remained evenly balanced between our respective networks, then competition between the two carriers must by implication have been strong.
104. That no other party has launched a network in the period prior to this year is not the fault of Vodafone and Telecom. We cannot but split the market between us when there is no other party operating in it.
105. Rather than prevent entry into the market – as 2degrees alleges – we would instead argue we have taken a number of actions to open up the market to greater competition. For 2degrees we have:
- sold spectrum in the valuable 900MHz range in 2007 at a significant discount to the price we paid for equivalent spectrum in this range;
  - entered into a national roaming agreement in November 2007 that the Commission considered when reaching a conclusion that it was not appropriate to recommend regulation of the service;
  - reached commercial agreement in 2008 to facilitate co-location on up to 116 network sites, selected by 2degrees, that 2degrees of its own volition subsequently declined to execute; and
  - agreed to provide mobile termination on highly favourable rates as part of a secret deal in September 2008.
106. In addition to this, the Commission has run a number of processes that have acted to assist 2degrees' entry into the market. For instance, it has:
- mandated the introduction of mobile number portability in August 2005, which was subsequently implemented on 1 April 2007; and
  - devoted considerable resources to make a standard terms determination (STD) for the mobile co-location service that to date 2degrees has hardly sought to take

advantage of (despite lobbying hard over many years for such a determination to be made).

107. 2degrees would have to be one of the most assisted parties into a mobile market anywhere in the world. Certainly none of these advantages were available to Vodafone (and its predecessor Bell South) when it entered the market in New Zealand.
108. Vodafone and Telecom have also voluntarily enabled greater competition in the retail mobile services market by entering into MVNO arrangements with 8 individually-branded service providers in New Zealand in recent years.
109. Rather than be resentful of the way in which Vodafone and Telecom have grown their subscriber bases over many years of hard competition in the mobile market in New Zealand while it sat on the sidelines arguing for the greatest set of regulatory concessions possible, we believe 2degrees should simply start competing on its merits. We look forward to the day it feels it can compete without further regulatory intervention in its favour.

### **3. The Commission is right to find that TSLRIC is the MTAS pricing principle that will best meet the purposes of the Telecommunications Act**

110. In its Draft Report, the Commission reaches a preliminary view that:

*... the pricing principles for MTAS should be based on the efficient forward-looking costs of supplying the service.<sup>36</sup>*

111. Further, the Commission notes that:

*... the Commission's preliminary view is that a cost-based pricing principle is likely to best give effect to the section 18 purpose of the Act. In particular, such a pricing principle is likely to promote efficient competition based on the underlying cost of supplying the MTAS, in the absence of externality effects. Absent such externality effects, a price for the MTAS that departs from the efficiently-incurred costs is likely to generate distortions by encouraging or discouraging competition for customers with a particular calling profile, as such competition would be based on the underlying costs of supplying services to such customer groups.<sup>37</sup>*

112. The Commission also notes, however, that BAK may merit further consideration in the future under certain circumstances.

113. In submissions from interested parties, a number of potential pricing principles are favoured by different parties. In essence, however, there are two main issues being discussed:

- first, whether the price of MTAS should be cost-based or free (i.e. set on a BAK basis)<sup>38</sup>; and
- second, if it is to be cost-based, what is the appropriate form of cost that should apply? In this respect, different parties provide submissions in favour of total service long-run incremental cost (TSLRIC); pure long-run incremental cost (LRIC)<sup>39</sup>; or simply prices equal (or closer) to the TSLRIC of PSTN interconnection services<sup>40</sup>.

114. The choice of pricing principle is a vitally important part of this investigation. Voice

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<sup>36</sup> Commerce Commission, *MTAS Draft Report*, at para [lv] at p. 19.

<sup>37</sup> *Ibid*, para [423] at p. 106.

<sup>38</sup> See, for instance, 2degrees, *op. cit.*, para [5.49] at p. 38; and Woosh/Kordia, *Submissions to the Commerce Commission in relation to MTAS Schedule 3 Draft Report*, at para [2.1] at p. 2..

<sup>39</sup> See, for instance, 2degrees, *op. cit.*, para [2.32] at p.16; Woosh/Kordia, *op. cit.*, para [2.8] at p. 3.

<sup>40</sup> See, for instance, CallPlus, *Submission on the Draft Report and Revised Undertakings*, 27 July 2009, at p. 3.

termination rates currently range between [

] **VNZAPI** for 2degrees and 15cpm on a minute plus second rounding basis on our network. If the Commission were to adopt a BAK pricing principle under regulation, the price would immediately fall to zero. As we have argued in other submissions, this would immediately remove hundreds of millions of dollars from our revenue over the next 5 years. It would also change the relative attractiveness of different types of consumers. For instance, it would make those customers who receive more calls than they make relatively less attractive to mobile operators. This is particularly the case for low-spend pre-pay consumers, and has been recognised by a number of respected authorities in this matter. Such customers can expect a reduction in the intensity of competition for them, with the potential for increased retail prices; the introduction of minimum monthly top-ups; faster credit expiry times etc. While not of quite the same magnitude, similar impacts can be expected if termination prices were to fall substantially under a move to a pricing principle such as pure LRIC, or if moves were made to immediately set the price of mobile termination at the price of PSTN interconnection services.

115. In this section of our submission we respond to arguments raised in other parties' submissions on pricing principles. In particular, we:

- show why a cost-based pricing principle has a number of efficiency advantages over BAK pricing. We also demonstrate how there is an increasing array of evidence being produced that shows how BAK pricing leads to a range of different (and undesirable) retail market consequences as compared to cost-based pricing principles;
- demonstrate how TSLRIC pricing principles that allow a contribution towards the recovery of common costs have a number of desirable properties over pure LRIC prices. We believe the distinction between TSLRIC and LRIC is an important issue that is easily misunderstood, and believe it is positive that debate has focused on this issue. This is because the views coming out of the EU on the direction in which prices should trend are based around its view that MTAS prices should be set on a pure LRIC basis. However, it is not clear that regulators in European jurisdictions will actually follow the *recommendation* of the EU. Most regulators around the world have previously shown a preference for TSLRIC pricing principles over pure LRIC approaches for many years. This is important, because popular expectations about the direction mobile termination rates may head to in the future are likely to be based around a misunderstanding of the contrasting views on preferred pricing principles of the EU and most regulators around the world;
- outline why we do not believe the Commission has the power to specify actual

*prices* in a pricing *principle*, as argued for by Kordia and Woosh and 2degrees in their submissions;

- agree with Kordia and Woosh that the benchmarking methodology employed by the Commission in the benchmarking analysis set out in the Draft Report is inconsistent with the pricing principles it proposes for the service. Unlike Kordia and Woosh, however, we think the Commission should correct its benchmarking analysis in the Draft Report to make it consistent with its proposed initial pricing principle rather than change its pricing principle; and
- note, in response to comments by 2degrees and Kordia and Woosh in relation to BAK pricing applied to other regulated services, that there are significant differences between the situation that surrounds the Homezone determination made by the Commission in the past and the MTAS issue presently before the Commission.

***The Commission is right to have a general preference for cost-based pricing over BAK***

116. 2degrees continues to push for a pricing principle based on BAK in its submission,<sup>41</sup> in spite of the Commission rejecting BAK in the Draft Report. We support the Commission's conclusions in the Draft Report that BAK will be distortionary, and will lead to inefficient incentives for mobile operators to generate certain types of traffic patterns or compete for certain types of customers; create inefficient investment incentives; and will incentivise arbitrage-seeking behaviour. We also agree there is no evidence that calling externalities are sufficiently strong to justify a below-cost termination rate, and that cost-based pricing is a principled approach that will generate efficient competition.

117. We have already submitted extensively on why BAK will lead to inferior market outcomes relative to a cost-based pricing principle,<sup>42</sup> and will not repeat those arguments in detail here. In this regard, it is sufficient to note that we argued that:

- BAK is radically different to existing interconnection payment models and will have substantial effects on retail pricing structures. Some consumers – such as low-spend pre-pay consumers – would be expected to be significantly worse-off as compared to existing arrangements. Many classes of consumers would expect to have to either start paying to receive calls and texts that they receive; or pay minimum monthly subscription fees, as occurs in the United States and Canada under modified BAK arrangements;

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<sup>41</sup> 2degrees, *op. cit.*, section 5.

<sup>42</sup> See Vodafone, 13 February 2009 submission at pars [48] to [136].

- the academic literature largely does not support the contention that BAK pricing is the most efficient way to promote competition in retail mobile markets;
- BAK, where it is only applied to MTM termination and not to FTM termination, has the potential to distort competition between mobile operators and fixed-line operators providing calls to mobile phone users;
- the academic literature does not support the contention that BAK pricing for MTM termination will result in economically efficient outcomes;
- by pricing mobile termination below its underlying cost of production, BAK will distort mobile operators' retail pricing incentives in a way that is likely to reduce the efficient use of, and investment in, mobile networks. Mobile operators will be motivated to attract those consumer segments to their network that make more calls to other networks than they receive, and will be encouraged to price some retail services for these consumer segments below the underlying cost of supplying services to them;
- BAK will incentivise arbitrage-seeking behaviour (FTM traffic being "dressed-up" as MTM in order to avoid non-zero FTM termination charges); and
- BAK is not costless to implement, and will require mobile operators to incur significant costs in order to configure number identification, billing systems and handover arrangements in order to differentiate those calls made to their networks that should be rated at zero (such as MTM voice calls), and those calls that shouldn't.

118. Rather than expand on these points again, we have limited our comments to some of the specific issues raised in the 2degrees submission on BAK.

*There is no problem in the retail market that can be 'solved' by BAK*

119. 2degrees submits that, because the Commission is limited to regulating wholesale prices, it must choose BAK in order to mitigate the 'harm' from on-net discounts<sup>43</sup>. As we have clearly demonstrated, our pricing has delivered huge benefits to consumers, in the form of low prices for a large volume of calls and texts. A move to BAK will drastically alter the incentives of mobile operators to compete for mobile customers and the structure of retail prices will change. In this regard, we may have to charge for incoming calls and/or increase the price of subscriptions and other services to cover the costs of termination that are no longer funded by termination revenues.
120. It is very difficult to compare market performance in BAK countries to those that price termination at cost, precisely because BAK leads to very different pricing structures, including RPP. In any case, there is no evidence that BAK leads to lower overall retail prices, or that consumers are better off under BAK. Indeed, countries with BAK like the US and Canada are consistently some of the worst performers in OECD benchmarking.
121. In a comprehensive cross-country econometric study for Ofcom, CEG found a relationship between lower levels of mobile termination rates and lower levels of mobile penetration.<sup>44</sup> Similarly, the empirical work by Genakos and Valletti showed evidence in favour of a strong but incomplete waterbed effect.<sup>45</sup> Since a move to BAK represents a large reduction in the MTR, it can be expected that there will be a large waterbed effect as a result. On balance, this is unlikely to lead to better outcomes for mobile consumers.
122. 2degrees also point out that in some RPP countries, pricing plans are available where customers do not pay for incoming calls<sup>46</sup>. Further, it notes<sup>47</sup> that:
- [a] 'bill and keep' regime has traditionally led to RPP. However it is also consistent with free incoming calls as have emerged in several RPP countries. In any case, near zero and zero termination local fixed call termination rates respectively in the US and Canada have in no way led to RPP for fixed calls.*
123. The distinction between RPP for mobile and RPP for fixed calls is significant. In the US, RPP has not arisen for fixed calls, but RPP has arisen for mobile calls.

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<sup>43</sup> 2degrees, *op. cit.*, at para [5.5].

<sup>44</sup> CEG, *Wholesale Termination Regime, Termination Charge Levels and Mobile Industry Performance: A Study Undertaken for Ofcom*. 20 April 2009.

<sup>45</sup> *Testing the 'Waterbed' Effect in Mobile Telephony*, CEIS Working Paper No. 110, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1114856](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1114856).

<sup>46</sup> 2degrees, *op. cit.* at para [5.13]

<sup>47</sup> *Ibid*, at para [5.14]

124. Further, 2degrees overlooks the fact that under US plans, the costs of termination are likely to be recovered through subscription fees. In New Zealand, prepay users do not pay a monthly access fee. "Prepay" in New Zealand has in fact become synonymous with "no access fee". Almost everyone in New Zealand can afford to have a prepay mobile phone, yet many poorer end users cannot afford a Telecom fixed line with its \$45 per month access fee.
125. By contrast, access fees feature prominently in US retail prepay plans. For example AT&T Wirelesses' website lists four prepay plans with monthly access fees ranging from USD\$29.99 to USD\$69.99.<sup>48</sup> In addition, AT&T Wirelesses' website lists two prepay plans with daily access fees ranging from USD\$1.00 to USD\$3.00<sup>49</sup>. These daily access charges apply only on the days where you use your phone, and because of the RPP (or more accurately, mobile party pays) environment, "use" means make or receive a call.
126. Further, AT&T Wirelesses' website only lists a single prepay plan with no daily or monthly access fees<sup>50</sup>. This plan features SMS rates of USD 20 cents, per SMS sent or received. At current exchange rates, that equates to approximately NZ 30 cents per SMS sent or received. If we assume that on average, users send and receive equal numbers of SMS, that equates to approximately NZ 60 cents per SMS sent (an alternative way to look at this, is that if you and your partner are both AT&T Wireless customers on this plan, sending an SMS to your partner will cost you as a couple NZ 60 cents, ie 30 cents to send, 30 cents to receive). Although this prepay plan appears to have no daily or monthly access fees, it should be noted that the minimum top up amount is USD\$15, and that top up credits of between USD\$15 and USD\$30 expire (are forfeited) within 30 days. There is therefore a lot of pressure to spend at least USD\$15 each month. The only way to avoid a short expiration period is to top up USD\$100, which gives a 365 day expiry period.
127. Spending approximately NZ\$150 to top up your prepay sim is unaffordable for many prepay users. It also makes it extremely difficult for users to have prepay sims for 2 or 3 competing networks in these circumstances, which is an option for users in New Zealand if they want to "self-arbitrage" to take advantage of different pre-pay rates for different types of calls on different carrier's networks.
128. Shown below are screen captures from AT&T Wireless<sup>51</sup>, and Verizon Wireless<sup>52</sup> websites, showing the expiration period on prepay topups.

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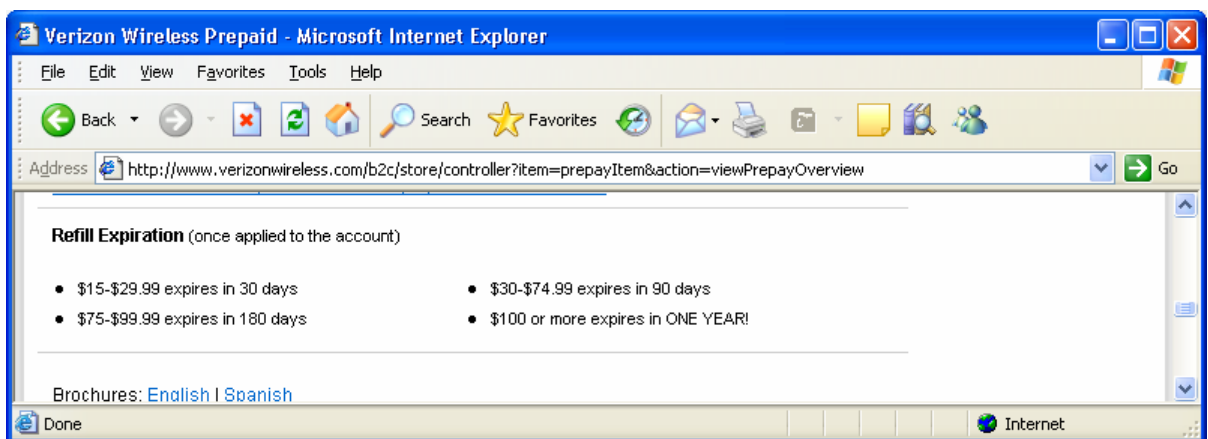
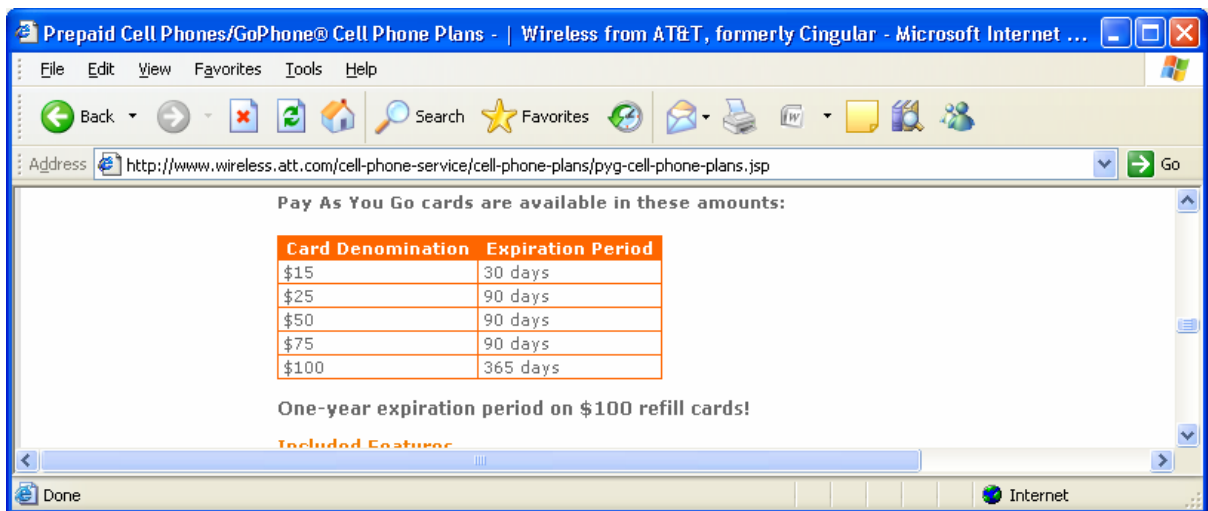
<sup>48</sup> <http://www.wireless.att.com/cell-phone-service/cell-phone-plans/pyp-cell-phone-plans.jsp>

<sup>49</sup> <http://www.wireless.att.com/cell-phone-service/cell-phone-plans/pyg-cell-phone-plans.jsp>

<sup>50</sup> <http://www.wireless.att.com/cell-phone-service/cell-phone-plans/pyg-cell-phone-plans.jsp>

<sup>51</sup> <http://www.wireless.att.com/cell-phone-service/cell-phone-plans/pyg-cell-phone-plans.jsp>

<sup>52</sup> <http://www.verizonwireless.com/b2c/store/controller?item=prepayItem&action=viewPrepayOverview> (you may need to enter a US zip code, we used 90210)



129. Overall, it is simply not possible to claim that consumers will be better off under such a regime, without considering the full range of prices that consumers face.

130. In a study undertaken for five European mobile operators, Frontier Economics examined the impact of reducing MTRs, and contrasted the market outcomes in Europe with those in the US.<sup>53</sup> Their key findings were that:

- lower MTRs do not lead to lower mobile prices overall;
- there is no evidence that below-cost MTRs (including BAK) are efficient;
- the consumer welfare effects of a drastic reduction in MTRs can be large;
- penetration and coverage are lower in the US compared to Europe; and

<sup>53</sup> Frontier Economics, *Assessing the Impact of Lowering Termination Rates*, July 2008, <http://www.frontier-economics.com/europe/en/publications/204/>.

- most European mobile consumers would not be better off under US-style pricing plans.

131. We agree with 2degrees that the Commission's task is to facilitate competition, not to support a particular market outcome<sup>54</sup>. However, despite 2degrees' assertion to the contrary<sup>55</sup>, this does require the Commission to account for how changing the MTR will affect retail mobile prices. It is in the retail market that consumer and total economic welfare is determined, and it is therefore impossible for the Commission to assess the effects of a change in the level of the MTR without considering how the level of the MTR affects retail prices. This is particularly important when considering a departure from cost-based termination (such as a move to BAK), as such a departure can only be justified if there are very strong consumer and efficiency gains from doing so.
132. The statements made by 2degrees in paragraphs 5.15 and 5.16 of its submission directly contradict each other, and highlight the unprincipled approach that 2degrees takes when arguing for BAK.

*A move to BAK will distort investment incentives*

133. 2degrees submits<sup>56</sup> that all returns to investment should come directly from the retail market. However, a call that originates on one network and terminates on another network is jointly produced by both networks. One of the main functions of the termination rate in a CPP regime is to divide the revenue earned by such a call between the two networks that contribute to the production of the call. This ensures that each network receives compensation for its investment from the services provided using that investment.
134. Under BAK, operators will be able to terminate calls on other networks at no cost, and will be able to keep all of the revenues earned from off-net calls. To the extent that this is not offset by the introduction of RPP or increases in other charges, it will weaken incentives to invest. Under BAK, 2degrees, which has not incurred the large cost of building a full coverage network, is likely to be able to appropriate some of the efficient return on the investment made by other operators, and BAK is also likely to limit 2degrees' own incentive to invest further in infrastructure. This would especially be the case if the commission moved to regulate national roaming rates in New Zealand on the same basis as it regulates mobile termination.
135. The implication is that a move to BAK risks harming dynamic efficiency, as well as generating

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<sup>54</sup> 2degrees, *op. cit.*, at para [5.16].

<sup>55</sup> *Ibid*, para [5.15].

<sup>56</sup> 2degrees, *op. cit.*, at para [5.23].

static welfare losses through a change in the level and structure of retail prices as explained above.

136. 2degrees also claims that, if traffic is balanced, BAK will not affect investor returns<sup>57</sup>. This obviously overlooks the fact that BAK will lead to inefficient outcomes in the retail market and will distort the competitive process, even if traffic is balanced. The key point is that BAK will affect the incentives of mobile operators to compete for different types of customer, and this is what drives the differences in retail outcomes.<sup>58</sup>

***TSLRIC pricing will generate better outcomes for consumers than pure LRIC pricing principles***

137. Given that a cost-based pricing principle for termination is preferred to BAK, an important question is the way in which cost is determined. Mobile networks are characterised by relatively large fixed costs, which do not vary with the number of customers or the volume of traffic handled. These fixed costs are used to jointly provide all mobile services, including access, origination and termination. A significant fixed and common cost is the cost of coverage. There are also other significant costs that are common to the provision of termination and other mobile services, including transmission and the core network, as well as ordinary business overheads.
138. To date, most regulators who have adopted a cost-based pricing principle for mobile termination (rather than BAK) have set termination rates on the basis of the long-run incremental cost of traffic, with an equi-proportional mark-up (EPMU) for the fixed and common costs of coverage and other common investments required for the network to function. This recognises the fact that without coverage and the other common investments, call termination would not be possible (and neither would call origination). There are many ways that these costs could be distributed across different retail services, but using an EPMU is relatively straightforward, and its popularity reflects the informational difficulties associated with a potentially more efficient regime based on Ramsey pricing theory.
139. 2degrees<sup>59</sup> and Kordia and Woosh<sup>60</sup> argue that termination should not include any mark-up for costs that are not driven by the volume of traffic that is terminated. Therefore, the costs of

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<sup>57</sup> 2degrees, *op. cit.*, at para [5.25].

<sup>58</sup> Unrelated to the arguments about BAK, 2degrees is also confused about what generates net traffic imbalances between networks (¶5.27). It is not on-net pricing *per se* that generates a traffic imbalance. If competition drives networks to offer similar prices, and they have a similar mix of customers, then traffic between networks will still be balanced even if on-net discounts are offered. A traffic imbalance is generated when the retail mix of customers differs, reflecting a differing marketing and pricing strategy used by different networks.

<sup>59</sup> 2degrees, *op. cit.*, at section 2.

<sup>60</sup> Woosh and Kordia, *op. cit.*, at pars [2.2] – [2.9].

coverage and all other common costs should be recovered only from retail services provided to a network's own customers, and not passed on to customers of other networks who make use of these investments when they make off-net calls.

140. Both 2degrees and Kordia and Woosh refer to a recent recommendation by the European Commission that the price of mobile termination be set on a purely incremental basis. We believe it is very important that this distinction is being raised, because there is a big difference between what the European Commission is suggesting and the pricing principles used to date by many other regulators around the world.

141. There are two related reasons why some recovery of common costs should be included in the price of mobile termination:

- all costs must be recovered somehow, and an efficient way to do that is for all services that make use of the common investment to contribute to the recovery of common costs; and
- to not recover any common costs from termination will lead to the same types of distortions as a move to BAK, albeit on a smaller scale.

142. Both of these points are discussed in more detail below.

*It is efficient for termination to contribute to the recovery of fixed and common costs*

143. Including a mark-up for common costs in the price of termination is based on sound economic principles, and reflects the reality that regulating the MTR does not change mobile operators' costs, and that all efficiently-incurred costs need to be recovered one way or another.

144. The reasons why it is efficient to include a mark-up for common costs in the price of termination are set out in a recent paper by Professor Janusz Ordovery, which is provided as an attachment to this submission.<sup>61</sup> Professor Ordovery's basic conclusion is:

*Unless there are sound economic or public policy reasons, no products or services should thus be exempt from bearing some responsibility for the recovery of total costs.*

145. As Professor Ordovery shows, having no mark-up for common costs in the price of termination will be an economically inefficient policy. Here, we summarise the basic arguments.

146. All efficiently incurred costs need to be recovered, including a reasonable return on investment reflecting the risks involved, for a firm to be willing to remain in a market in the

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<sup>61</sup> Compass Lexecon, *Recovering Fixed and Common Costs for Mobile Networks in Europe*, 4 August 2008.

long run. While pricing at marginal cost is efficient given that the firm remains in the market, it will not be sustainable in the long run. This is particularly important in mobile telecommunications markets where fixed and common costs are large.

147. There are three basic ways that prices can be set to achieve efficient cost recovery when there are fixed costs. First, prices for usage could be based on average costs. Second, usage prices could be set at marginal cost, and subscription fees used to recover the fixed costs. Third, usage prices could be set at marginal cost, and lump-sum taxes and transfers to the firm could be used to recover the fixed costs.
148. Given that such taxes and transfers are not available, fixed costs must be recovered through retail pricing. Regardless of whether or not subscription fees are used, this necessarily involves creating some sort of distortion and welfare loss in the retail market.<sup>62</sup> The key question is how to recover the fixed cost by creating the smallest possible distortion. When the fixed cost is *common* to more than one service, the problem is to set the mark-ups over marginal cost across the services in the least distortionary way. This leads to the well-known principles of Ramsey pricing where, in the simplest case, services with relatively inelastic demand have relatively bigger mark-ups.
149. For mobile termination, additional considerations modify the standard Ramsey pricing principles. One is the fact that termination is a two-sided market. In two-sided markets, the demands and hence the consumer welfare generated on the two sides of the market are interrelated. This means that the price set on either side must take account of demand conditions on both sides, or equivalently that the prices charged to the two sides must be set jointly. This does not change the basic intuition of Ramsey pricing, but means that the interrelationship between the two demands must be taken into account when setting the mark-ups.
150. Second is the extent to which other externalities exist that may justify a departure from the standard Ramsey principles. For mobile termination this includes network externalities and call externalities. Network externalities arise if consumers benefit when the number of mobile subscribers increases. Due to the waterbed effect, a change in the termination rate will affect the number of mobile subscribers. Everything else equal, the existence of a network externality and the waterbed effect means there is a justification for an additional termination mark-up.

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<sup>62</sup> In theory, setting usage prices at marginal cost and using a subscription fee to recover the fixed costs can be non-distortionary, but only if all consumers are identical, which is not the case. If consumers are not identical, the use of a subscription fee will create a distortion as it will cause some consumers not to use any services even if they are willing to pay the marginal cost of those services.

151. Potentially offsetting this is the existence of call externalities, where the receiver of a call derives a benefit from it and this is not taken into account by the caller under a CPP regime. Given that most mobile users tend to call a relatively small circle of people with whom they presumably have some sort of long-term relationship, we believe that the value to call receivers is largely internalised by the call maker, and the magnitude of the call externality is not significant. In any case, there is no evidence that call externalities are sufficiently important that they offset the network externality and justify a below-cost termination rate.
152. To not allow a mark-up for fixed and common costs in the price of termination means that greater mark-ups must be applied to other retail mobile services. This is in violation of the basic Ramsey principles which try to recover all costs with the least possible distortion. Adopting the EC's proposal would therefore unnecessarily harm end-users and would be inconsistent with the objectives of the Act.
153. As discussed above, properly implementing Ramsey pricing is difficult, and so rules of thumb like EPMU are used instead. The alternative of allowing no mark-up for common costs in the price of termination is highly likely to be less efficient than EPMU, as it is equivalent to assuming that the demand for mobile termination, which is derived from the demand for calls to mobile networks, is perfectly elastic. This is particularly important in mobile networks where fixed and common costs, including coverage costs, are significant, and so the distortions created by allowing no mark-up for these costs in the price of termination will be large.

*The assumptions needed to justify below-cost termination also remove rationale for regulation of termination*

154. We note that the discussion about what assumptions are needed to show that below-cost termination is welfare enhancing (whether it be BAK or adoption of pure LRIC) is taken within a vacuum and without any acknowledgment of the implications for other regulatory considerations.
155. There is a further paradox to the call externality debate – namely that if customers really did value receiving calls and were therefore sensitive to the costs imposed on others for calling them, we could expect mobile termination rates to be an important element in determining the network selection made by customers. In other words, large call externalities would imply that mobile operators would be subject to competitive constraints upon their own mobile termination charges. This result is proven in the economic model developed by Baranes and

Flochel (2008).<sup>63</sup>

156. The assumptions required to come to the conclusion that pure LRIC is better than TSLRIC based pricing are the same assumptions required to show the market for mobile termination is competitive. The Commission cannot assume one set of facts for one desired policy outcome without also applying the same assumptions to other policy outcomes.
157. If the Commission believes that Kordia, Woosh and 2degrees have proven that these assumptions are reasonable, the Commission must come to the conclusion that the rationale for MTR regulation no longer holds.

*Below-cost pricing of termination without the above assumptions will distort competition and investment incentives*

158. BAK is an extreme form of below-cost pricing of termination. The same reasons discussed above as to why BAK will distort competition and investment also apply if there is no termination mark-up for fixed and common costs. It is simply a matter of the degree to which these distortions are generated.
159. In its submission, 2degrees recognises that the termination rate and retail competition are linked, but its arguments in favour of BAK, or, failing that, pricing termination below cost, are not based on sound economic principles. The basic point is that the price of termination is related to incentives to compete in the retail market, and affects investment incentives if a distortion in the price of termination leads to a reduction in the ability for networks to earn a reasonable return on efficiently incurred investments.
160. It is therefore clear that the reasons why the Commission correctly rejected BAK as a pricing principle would also lead it to reject a pricing principle that does not include an efficient contribution to the recovery of fixed and common costs.

***A "price" is not a pricing "principle"***

161. Kordia and Woosh submit that the initial pricing principle (**IPP**) for the FTM and MTM voice termination services should be BAK, with the TSLRIC/BAK option applying for the final pricing principle (**FPP**).<sup>64</sup> Alternatively, Kordia and Woosh say that for the purposes of one year, the Commission could make the IPP a rate of 7.2cpm. They say that parties can quickly instigate the FPP pricing review if they wish, and that they are only talking about addressing a short time period in this manner.

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<sup>63</sup> Baranes, E & Flochel B, (2008), "[Competition in telecommunication networks with call externalities](#)," [Journal of Regulatory Economics](#), vol. 34(1), pages 53-74,

<sup>64</sup> Kordia and Woosh submission of 28 July 2009, section 7 onwards

162. 2degrees suggests several alternatives of dealing with the IPP and FPP.<sup>65</sup> One such alternative uses an IPP of the current fixed termination rate (i.e., 1cpm), adjustable at the FPP stage if it could be demonstrated that the true LRIC costs were higher or lower.
163. Vodafone disagrees with Kordia and Woosh that “the Act is sufficiently flexible to allow this approach”<sup>66</sup> and believes the 2degrees suggested alternative cannot be considered. This is because the Commission may not recommend a particular price as the IPP or FPP for a designated service under the Act.

*The policy of Part 2 to Schedule 1 of the Act*

164. Part 2 of Schedule 1 to the Act sets out the rules for the Commission to apply when making certain determinations. These rules are designed to be adaptable – that is, capable of application to the particular conditions at the time of the relevant determination. In this way, the determination process will be able to produce a result that best achieves the section 18 purpose at any given point in time.
165. Defining a static “price” in the place of a “pricing principle” subverts this intention by precluding the Commission from performing any pricing analysis. The result would be the determination of price terms that are not capable of reflecting the particular conditions – including, in relation to efficiencies – at the time of the relevant determination. This approach is unlikely to satisfy the section 18 purpose of the Act.

*Other indicators*

166. There are strong contextual arguments that support the argument that the Commission may not recommend a particular price as a pricing principle. For example:
- the context in which the word “principle” appears in the Act suggests that it is a “method” or rule that the Commission must “apply” in order to “calculate” or “determine” a price. On the other hand, Kordia, Woosh and 2degrees have not provided any contextual indicators suggesting that a static “price” could ever be a “pricing principle”;
  - the natural and ordinary meaning of the word “principle” is consistent with the concept that it must be a “rule” that is able to be applied;

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<sup>65</sup> 2degrees submission of 28 July 2009, section 6.22

<sup>66</sup> Kordia and Woosh submission of 28 July 2009, section 7.2

- the Commission’s preliminary view in its draft report is that:
  - “the pricing principles for MTAS should be based on the efficient forward-looking costs of supplying termination services”<sup>67</sup>;
  - “based on the precedent of other designated services under the Act... the form of the IPP should reflect that of the FPP”<sup>68</sup>; and
  - “the MTAS should be subject to a pricing principle that is similar to that for the fixed PSTN origination and termination service”<sup>69</sup>.
- we note that a static price is unlikely to reflect efficient forward-looking costs, or the other conditions in these statements, particularly over time; and
- the Commission has previously taken the view that “the final pricing principle needs to specify [an] actual calculation... at a forward-looking cost-based price”<sup>70</sup>.

167. In summary, the overwhelming weight of evidence suggests that a static “price” cannot be a “pricing principle”. Such indicators include the policy relating to designated services under Schedule 1 of the Act, the context in which the term “pricing principle” appears in the Act and the Commission’s previous analysis of the term.

***Kordia and Woosh are right to note that the Commission’s benchmarking estimates in the Draft Report are inconsistent with its own proposed pricing principles for the MTAS***

168. Kordia and Woosh are right to note that the Commission’s benchmarking estimates in the Draft Report are inconsistent with its own proposed pricing principle for the MTAS.<sup>71</sup> However, it is the benchmarking that needs to be revised, not the pricing principle as suggested by Kordia and Woosh.

169. In their submission, Kordia and Woosh state:

*We are very pleased that the Commission has accepted our submission that benchmarking should be based on underlying cost assessments by regulators, where available, in preference to regulated prices which overlay those cost assessments.*<sup>72</sup>

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<sup>67</sup> Commerce Commission, *op. cit.*, at para [1v], and throughout

<sup>68</sup> *Ibid.*, at para [362]

<sup>69</sup> *Ibid.*, at para [427]

<sup>70</sup> Commission Draft Report on Schedule 3 Investigation into Mobile Termination October 2004, paragraph 598

<sup>71</sup> Kordia and Woosh, *op. cit.*, at para [3.4]

<sup>72</sup> *Ibid.*, at para [3.1]

170. Further:

*However the intended, and correct, approach is not yet accurately recorded in the proposed IPP principle. This refers to “benchmarking against MTAS prices in comparable countries...”. Assuming “MTAS” is defined as the services themselves, this means that the focus is the regulated price and not the underlying cost assessment.<sup>73</sup>*

171. We agree as stated in our submission on the Draft Report that the Commission’s benchmarking thus far in this investigation is inconsistent with its proposed IPP. However, we disagree with Kordia and Woosh that the pricing principle should be altered.

172. As we submitted in our response to the Commission’s Draft Report, and as Analysys Mason have pointed out, the benchmarking should be altered to reflect the pricing principle—and corrected for numerous other errors.

173. Analysys Mason<sup>74</sup> notes that price is often set above modelled cost to:

- avoid costs being under-recovered because the modelled cost doesn’t reflect the actual service cost; and
- allow a gradual transition of mobile termination rates from existing levels to levels calculate by means of a cost model.

174. In addition, regulators often set a margin above cost because there is asymmetric risk associated with setting the price too low. Too low a price will dampen investment over a number of years, so will have a large dynamic cost. This is the rationale for the Commission favouring the 75<sup>th</sup> percentile for its benchmark in the previous MTR investigation.

175. Table 4 of Covec’s submission on the Draft report shows that if the benchmarking was revised to reflect this more common approach — and corrected for various other errors and omissions — then the median cost estimate is 12.38cpm and the 75<sup>th</sup> percentile is 14.3cpm.

***Mobile termination is very different to local interconnection***

176. In their submissions, 2degrees, Woosh and Kordia make much of previous submissions by Vodafone on the suitability of BAK for local call interconnection. 2degrees states that because a zero access charge is applied to traffic between Vodafone’s *Homezone* customers and Telecom’s fixed network, bill and keep would be a more efficient IPP for the MTAS.<sup>75</sup> Woosh

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<sup>73</sup> Ibid, at para [3.4]

<sup>74</sup> Analysys Mason, *op. cit.*

<sup>75</sup> 2degrees, *op. cit.*, at Part 1 – Overview, para [5]

and Kordia state that the *Homezone* connection is “conceptually indistinguishable” and that it is of “particular concern” that Vodafone argues so strongly against bill and keep given the *Homezone* situation.<sup>76</sup>

*Mobile termination is very different to local interconnection*

177. As we outlined in our submission of 13 February 2009, the comparison between mobile termination and local call interconnection is misguided. The provision of local call services in New Zealand is subject to retail price controls in a way that retail mobile services are not. Put simply, local calls in New Zealand are subject to retail price control arrangements that mean Telecom has an obligation to offer a retail price for local calls of zero. As a result of this, Telecom (and other fixed-line operators) recover their costs of providing local calls through monthly access fees, rather than through per minute (or per call) charges for retail local call services.
178. For calls to mobile operators, however, no such retail price control restriction presently applies. 2degrees’s proposal – which marries a restriction on the ability of parties to offer differentiated prices for calls to consumers on different mobile networks with a bill and keep arrangement – has the effect of introducing a retail price control arrangement where one does not already exist. Not only is this likely to lead to inefficient retail pricing structures by introducing a disassociation between the price of mobile calls and their underlying costs of production, it is also likely to inhibit competition by restricting the ability of mobile operators to differentiate their service offerings to consumers. This is unlikely to achieve the purpose set out in Section 18 of the Act.

*Technology Neutrality*

179. More broadly, the issue underpinning Vodafone’s *Homezone* application was a technology neutrality concern (Vodafone provides *Homezone* via its cellular mobile network, and was concerned that Telecom’s Telecommunications Service Obligation (TSO) to offer free local calling might not cover calls to *Homezone* numbers). As well as introducing the 0867 number range, Telecom required bill and keep interconnect arrangements for local calling in response to the millions of dollars in interconnect payments Telecom had to make as a result of carriers providing free dialup internet using local numbers eg CLEAR (Zfree), Compass (Freenet) etc. The bill and keep arrangements required by Telecom for local calls impose extra cost on the rest of the industry because of their complexity to implement and bill, since separate POLI links are required to differentiate for billing purposes from paid (1 cpm) standard calls delivered over SPOLI links (primarily because of complexities such as call forwarded calls).

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<sup>76</sup> Woosh and Kordia, *op. cit.*, at pars [6.5] and [7.8]

This proliferation of links (24 SPOLI plus 24 POLI = 48 nationwide) is inefficient for carriers having to lease extra interconnect links and transmission links, particularly in and from smaller locations where the links are not efficiently utilised.

#### *Homezone and the TSO Deed*

180. The *Homezone* decision was required to correct for a peculiarity in the telecommunications regulatory regime which had been artificially created by the TSO deed for local residential telephone service between Telecom and the Crown (the **TSO Deed**). Under the TSO Deed, Telecom undertook to provide a local residential telephone service subject to certain principles. These principles included a requirement to maintain a “local free-calling option” for all Telecom residential customers (principle 1, clause 7.1 of the TSO Deed). However, the scope of the TSO Deed expressly excluded “calls to or from telephones or devices connected to cellular, mobile radio, paging and other non-PSTN networks” (clause 3.3(b) of the Schedule to the TSO Deed). Vodafone considers that the cellular exclusion was required to protect Telecom from having to offer its local free-calling option in circumstances in which it would be required to pay a standard mobile termination charge.
181. The *Homezone* decision was also required to correct for the incomplete nature of the TSO Deed provisions. In particular, the cellular exclusion created a competitive risk where Telecom was not required to make interconnection payments for local calls that terminated on a cellular network and yet would have been entitled to charge a retail premium for those calls. The Commission considered that, given that local voice calls made to Vodafone local numbers would not involve interconnection payments, and will not result in Telecom incurring costs beyond those caused by other local voice calls, any such discriminatory charge could not be justified. The Commission therefore imposed a requirement on Telecom to not discriminate between local voice calls made to Vodafone local numbers and local voice calls made to any other carriers’ local numbers.

#### *Conclusion*

182. It is instructive to note the relationship between zero termination charges and the need to recover network costs through inflated access charges. Just as providers of local calls recover their network costs through inflated monthly access charges to receive a local call service, so will MNOs need to recover their network costs through inflated monthly access charges (or via charges to receive calls) under a bill and keep arrangement for MTM termination. In turn, this would be likely to reduce the number of mobile subscribers, as many low-spend consumers who presently avoid having to pay a high monthly access charge under existing models may find mobile phone ownership prohibitively expensive.

183. Just because social policy concerns around the desire to provide local calls at zero prices have distorted interconnection arrangements for local call services, this does not mean it is efficient for interconnection and retail call charges to be set on this basis. It also does not mean that this promotes competition for the benefit of end-users in the local call services market.
184. Where social policy concerns do not dictate that zero per minute/call retail prices are set for retail prices for mobile telecommunications services, it is inappropriate (and inefficient) to set bill and keep interconnection charges for MTM termination.
185. BAK arrangements for local call interconnection do not serve to illustrate the appropriateness of setting bill and keep for MTM termination; instead they serve to underline the retail pricing distortions and consequences that will follow for consumers of mobile telecommunications services.

#### **4. The Commission's cost benchmarking is not conservative enough**

186. 2degrees submitted on the Commission's benchmarking and argued that the Commission's benchmarks for voice and SMS are too high.<sup>77</sup> We disagree with 2degrees, and as submitted by ourselves, Analysys Mason and Covec, there are very good reasons why the Commission's benchmarks are flawed and are too low. We do not intend to repeat all of these submissions here. It is sufficient to note we have expressed, and continue to hold, serious reservations about the Commission's cost benchmarking analysis, as contained in the Draft Report.
187. In this submission, we instead narrow our focus only to comment on specific comments raised in 2degrees' submission on the Commission's benchmarking analysis.

#### ***Benchmarking should not be adjusted to exclude common cost contributions from cost estimates in overseas jurisdictions***

188. In terms of voice, most of 2degrees' arguments about why the benchmark should be lower relate to the question of whether termination rates should make a contribution to common costs. We have discussed the reasons why it is efficient to include a contribution towards common costs elsewhere in Section 3 of this cross submission.
189. Contrary to 2degrees' submission<sup>78</sup>, common investments such as base stations are used jointly to provide all mobile services, including off-net termination. Basic economic principles therefore dictate that termination should contribute to the recovery of these costs. For this reason, most of the arguments advanced by 2degrees as to why the Commission should choose its benchmark from the lower range of the benchmarking set are incorrect.
190. We also do not think the adjustments made to the WIK cost model for Australia provide any useful information about the cost of mobile termination in New Zealand. As we have submitted, the ACCC in Australia decided that this model produced an estimate of the cost of termination that was too low. Making adjustments that further reduce the cost estimate only exacerbates this error. In addition, it is not clear that Australia is highly comparable to New Zealand. Even without the types of adjustment proposed by 2degrees, the cost of termination in Australia and New Zealand may be very different.

#### ***There is no economic argument for selecting a benchmark below the median***

191. In contrast to the well-known dynamic efficiency reasons for choosing a benchmark above the median, it is not possible to make a principled economic argument for choosing a benchmark below the median.

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<sup>77</sup> 2degrees, *op. cit.*, at section 3.

<sup>78</sup> See, for instance, 2degrees, *op. cit.*, at para [3.7(b)].

192. We disagree with the arguments made by WIK, and endorsed by 2degrees, that other regulators who have set termination rates on the basis of cost models have erred and estimated the cost too high. In most cases, cost models are developed through rigorous and transparent processes, involving independent experts. We are not aware of any evidence showing that the results are biased upwards. The EC recommendation relied on by WIK is more than ten years old and dates from a time when cost modelling was not prevalent. We do not think those arguments are valid now, given the effort that is spent by regulators on cost modelling.

***The Commission's SMS benchmarking is flawed, but it should not be adjusted to make benchmark prices lower***

193. We agree with 2degrees that the Commission's benchmarking of SMS, based on only two data points, is flawed. Any benchmarking based on such an extremely small sample will be subject to a very large amount of uncertainty. The Commission has attempted to compensate for this by selecting the higher of its two benchmarks. However, given that there are only two numbers to benchmark against (and which differ by a large amount), there is still a high probability that the Commission's benchmark of the cost of SMS termination will not reflect the true cost, and there is a significant risk of under-compensating the investments made by mobile operators.

194. 2degrees fails to understand (and ignores) the valid dynamic efficiency argument for selecting the upper benchmark in this case. Termination revenue is part of the compensation that mobile networks receive for making risky investments. Setting the benchmark too low will lead to under-compensation of the investment, and will reduce incentives to invest. This will ultimately lead to reduced quality or fewer services provided to end users, creating economic detriments. In Vodafone's view, the Commission has not been cautious enough. This is especially the case given an efficient price for SMS termination is likely to require a price above the TSLRIC of providing the service on account of the costs of SMS spam. This is discussed in detail in our submission to the Commission's Draft Report.<sup>79</sup>

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<sup>79</sup> See Vodafone submission to the Draft Report, 28 July 2009, at pars [402] – [408], at pp. 109 – 110.

## **5. The Commission should not prevent on-net price discounting under the Telecommunications Act**

195. Throughout this investigation, 2degrees has been greatly concerned about its ability to compete with existing operators in the presence of on-net price discounting. It clearly considers that if existing operators charge discounted prices for calls and texts made to consumers on their own networks, it will struggle to attract consumers to its network. For this reason, it has sought for the Commission to prevent existing operators from setting different retail prices for calls to consumers on their network as compared to calls to consumers on other networks. In particular, it has sought for the Commission to introduce “non-discrimination provisions” that prevent what is referred to as “on-net” price discounting.
196. In its Draft Report, however, the Commission finds that provided MTAS prices are cost-based, non-discrimination provisions are not required under regulation to ensure a competitive market in the long-term interests of end-users.<sup>80</sup>
197. In its submission in response to the Draft Report, 2degrees again raises concerns about its ability to compete in the retail mobile market in the presence of on-net price discrimination. Further, it argues that even if the Commission were to set BAK prices for mobile termination, there would be nothing to stop existing operators from using on-net price discounting. In this regard, it argues that:

*... even BAK still does not resolve on-net pricing differentials unless the Commission prohibits off-net price discrimination. Put another way: even with BAK what is to stop Vodafone from maintaining its closed networks by charging more for off-net calls?<sup>81</sup>*

198. Therefore, it believes the Commission must go further than lowering mobile termination rates and actively intervene in the retail mobile market to prevent on-net price discounting. In this regard, it advocates that:

*... the Commission should as part of any determinations, require that each Access Provider does not impose any charge on its retail customers that would discriminate between calls and SMS messages to customers of any Access Seekers, and calls and SMS messages to its own customers.<sup>82</sup>*

199. It argues such intervention would be beneficial for consumers:

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<sup>80</sup> Commerce Commission, *MTAS Draft Report*, at para [897] on p. 196.

<sup>81</sup> 2degrees, *op. cit.*, at para [7.10] on p. 45.

<sup>82</sup> 2degrees, *op. cit.*, at para [7.6(c)] on p. 45.

*Certainly, consumers will not be upset about disruptive price falls and the availability of new packages that help break the inefficient constraints they currently face when they wish to access off-net subscribers.*<sup>83</sup>

200. In response to these views, Vodafone:

- agrees with 2degrees that a move to BAK pricing is not likely to stop on-net price discounting. This is clearly evident given that on-net price discounting is common to almost all retail mobile markets around the world – including those where BAK pricing is evident such as the United States, Canada, Singapore and Hong Kong<sup>84</sup>;
- strongly disagrees that banning on-net pricing would be beneficial for consumers. The introduction of a blanket ban on on-net price discounting would remove a key way in which mobile operators can differentiate their product offerings, and make prices on networks more similar rather than differentiated. In that sense, it would limit ways in which mobile operators can compete rather than promote competition. To be clear, a ban on on-net price discounting would mean the end of products such as BestMate; Family etc. These are the products that have driven great benefit into the mobile market in New Zealand in recent years. We believe they are products that can be matched by any participant in the market – irrespective of their market share – and are in no way anti-competitive. Where plans like this create significant benefits for consumers and are not anti-competitive, they should not be banned; and
- repeats its arguments from earlier submissions that on-net price discounting is a pro-competitive way in which mobile operators can try to more quickly gain market share and distinguish themselves from their rivals. 2degrees' proposal to use the Act to apply a blanket ban on all forms of on-net price discounting is contrary to the well understood principle of using the access regime to deal with interconnection/access pricing issues at the wholesale level and the flexibility of anti-competitive conduct provisions of the Commerce Act to deal with individual retail pricing concerns. In short, the Act is too blunt an instrument for dealing with retail price behaviour, and should not be used to ban all forms of on-net price discounting at the retail level. If the Commission has concerns about a particular on-net pricing offer, it has the powers to address these concerns using the Commerce Act. We believe this is a more appropriate means for sorting out which

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<sup>83</sup> 2degrees, *op. cit.*, at para [7.7] on p. 45.

<sup>84</sup> See Vodafone, *Submissions on the Schedule 3A Undertakings provided on 12 January 2009*, 13 February 2009, at Figure 3 on p. 48.

retail offerings are anti-competitive and which should be left alone.

201. Our views on these points are set out, in turn, below.

***On-net pricing occurs in competitive markets all around the world – including those with BAK***

202. 2degrees is right to note in its submission that introducing BAK will not be likely to stop mobile operators from offering on-net price offers in the retail mobile market. This is consistent with arguments made by Vodafone in earlier submissions, where we have noted that:

- on-net price discounting is common all around the world; and
- there appears to be no empirical correlation between lower termination rates and a lesser degree of on-net price discounting.<sup>85</sup>

203. It is also clear that on-net price discounting occurs in key jurisdictions where 2degrees notes BAK pricing applies. For instance:

- in the United States, Verizon offers unlimited free national mobile to mobile on-net calls<sup>86</sup>;
- in Canada, Bell offer on-net share plans<sup>87</sup>, which are similar to BestMate and Family plans;
- in Singapore, M1's "Sunshare" offer provides unlimited minutes to three M1 customers within call groups<sup>88</sup>; and
- in Hong Kong, 3 includes "Heart-to-Heart" calls to other 3 customers as part of its bundled offering<sup>89</sup>.

204. Not only is on-net pricing prevalent in those countries that offer BAK, it also seems in the case of the United States to be greater than what is observable here in New Zealand. For instance, here in New Zealand, Vodafone's on-net voice offers for non-business users generally only

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<sup>85</sup> See, for instance, Vodafone, *Submission on the Schedule 3A Undertakings provided on 12 January 2009*, 13 February 2009, at pars [151] – [152], at p. 48.

<sup>86</sup> See: <http://www.verizonwireless.com/b2c/splash/plansingleline.jsp>

<sup>87</sup> See: [http://www.bell.ca/shopping/PrsShpWls\\_RtpSharePlans.page](http://www.bell.ca/shopping/PrsShpWls_RtpSharePlans.page)

<sup>88</sup> See:

<http://www.m1.com.sg/M1/site/M1Corp/menuitem.e2f30a2a1a1860b609b422103f2000a0/?vgnextoid=c62035f49cbb8110VgnVCM100000695a230aRCRD&vgnnextfmt=pdate:0908141326>

<sup>89</sup> See:

<http://www.three.com.hk/website/appmanager/three/home?nfpb=true&pageid=211101&pageLabel=P200470391219567710594&lang=eng>

apply to closed user group arrangements such as BestMate and Family. By contrast, the Verizon offer referred to above appears to extend to **all** on-net calls.

205. Vodafone believes the evidence from overseas suggests that on-net price discounting is a common feature of mobile telecommunications markets all around the world. It occurs irrespective of the mobile termination rate, or the state of competition in relevant mobile markets.
206. It follows, therefore, that the combination of high termination rates and on-net price discounting is not a barrier to competition *per se* – it occurs in markets considered to be more competitive than that here in New Zealand. Indeed, as indicated in previous submissions, on-net price discounting has sometimes been **introduced** by new entrants to mobile markets as a way to differentiate themselves and grow market share.<sup>90</sup>
207. Interestingly, we note that 2degrees’ initial offering into the retail mobile market involves an “open user group” on-net price discount for voice calls. That is, under its recently announced rate plans, 2degrees offers its consumers half-price calls to **all** other 2degrees consumers if they purchase a \$20 “magic top up”. This is a level of on-net discounting for voice that covers a potentially much wider consumer base than closer user group offerings such as BestMate and Family that are limited to groups of only 2 or 4 consumers.
208. We do not begrudge 2degrees offering on-net discounting plans that potentially apply to large numbers of consumers. We welcome the competition. However, we do believe it illustrates that on-net price discounting can be pro-competitive and should not be banned outright.

***On-net price discounting provides great value for consumers***

209. As indicated in our previous submissions, on-net price discounting is an important way in which mobile operators can compete to differentiate themselves in the way they provide services to consumers. Importantly, on-net price offers have been a significant way in which New Zealand consumers have benefitted from increased competition in recent years.
210. For instance, BestMate and Family have provided incredible benefits to consumers since their introduction, and have had the effect of significantly driving down average call revenue per minute and revenue per text on our network. For instance:
- our average pre-pay BestMate customer makes calls and texts to the value of \$375 each month at standard call rates for only \$6; and

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<sup>90</sup> See, for instance, the activity of EPlus in Germany in 1994 and Digifone in Ireland in 1997, as referred to in our February submission at para [144] on pp. 46 – 47.

- our average Family hub makes \$390 of calls and texts each month at standard prices for only \$20.

211. As indicated in Section Two above, Vodafone New Zealand now has a lower average revenue per voice minute and lower average revenue per SMS than for any of Vodafone [

] **VNZCOI**. This was not the case in 2004-05. The introduction of compelling on-net price discounting offers such as BestMate and Family have played a substantial role in driving the massive decreases in average revenue per unit for voice and SMS, and the substantial increases in usage for both services since this time.

212. These numbers show how much consumers are benefitting from on-net price discounts. Rather than acknowledge the benefits consumers have received from this type of offering, however, the Commission notes in its Draft Report that:

*... in the presence of on-net price discrimination, the extent to which 2degrees is able to compete in the market is likely to be highly dependent on the termination rates it faces.<sup>91</sup>*

213. Vodafone believes this comment makes no sense in the context of an offer such as BestMate or Family. These offers apply only to closed user groups of either 2 (in the case of BestMate) or 4 (in the case of Family) users on the same network. To match these offers, a new entrant does not need to draw the whole of its rival's mobile network on to its own to match the benefits available under the Vodafone BestMate offering. Instead, it only needs to attract 2 people to its network. Similarly, with Family, a new entrant only needs to attract 4 consumers to its network. If a group of 4 consumers has been able to organise itself sufficiently to join up to a Family offer together, we believe they should be able to be easily targeted by a new entrant so that it can get them to move to its network as a block – thereby more quickly growing its market share.

214. We believe the Commission needs to be more careful in the comments it makes about the on-net pricing offers available in the market. Rather than make broad-brush comments about on-net pricing, we believe it should identify particular offers it has concerns with. And if it has such concerns, it should take appropriate actions under the Commerce Act to try to deal with these concerns.

215. To be clear, we do not think that any of our on-net pricing propositions are anti-competitive; nor that a compelling case has been made out that they are.

216. In contrast, we believe they are pro-competitive; welfare enhancing; and highly valued by

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<sup>91</sup> Commerce Commission, *MTAS Draft Report*, at para [306] on p. 87.

consumers.

***The Commission should use the Commerce Act rather than the Telecommunications Act if it has concerns about particular on-net pricing offers***

217. Vodafone recognises the Commission has concerns about the combination of on-net pricing and current mobile termination rates. We do not share these concerns. However, if there were to be a concern, we believe the Commission must carefully apply the tools it has at its disposal in the right way to address its concerns. In this regard, we believe it is crucially important that it:

- sets an access price for the MTAS that best promotes competition and efficiency more generally in all relevant markets. We agree with the Commission that such a pricing principle is TSLRIC;
- not place an outright ban on all forms of on-net pricing because there are many circumstances where it can be pro-competitive and of great benefit to consumers; and
- if it does have lingering concerns about a particular form of on-net pricing conduct, it should act swiftly to seek to address these concerns using the relevant provisions of the Commerce Act. Further, this option is available to the Commission now – it does not have to wait until 2011 to seek to address retail price issues as it would under a process such as a standard terms determination.

218. Good telecommunications regulators recognise there is an appropriate role for both an access regime and anti-competitive conduct regimes – and that the two tools are complimentary. However, the right tool should be used in the right circumstance.

219. The Commission would appear to understand this. It has previously recognised that on-net pricing is not anti-competitive *per se*:

*... differentiation between on-net and off-net pricing is not an issue in itself<sup>92</sup>*

220. Further, it has indicated that:

*Pricing differentials with regards to on-net discounts will need to be assessed as a form of potential anti-competitive behaviour on a case-by-case basis.<sup>93</sup>*

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<sup>92</sup> Commerce Commission, *Telecommunications Act 2001: Schedule 3 investigation into regulation of mobile termination – Issues Paper*, 8 August 2008, at para [35] on p. 11.

<sup>93</sup> *Ibid*, at para [101] on p.29.

221. Vodafone agrees with this proposition. We believe it would be impossible for the Commission to design a pricing principle for MTAS that has the effect of preventing those forms of on-net price discounting that are anti-competitive while also enabling those forms of on-net price discounting that are pro-competitive. We also believe no such pricing principle has been proposed that can have this effect.

## **6. The counter-factual should include consideration of our interconnection agreement with 2degrees**

222. Kordia and Woosh submit that no private agreement, including the interconnection agreement between Vodafone and 2degrees (**Vodafone/2degrees ICA**), should be used as a counter-factual.<sup>94</sup> The key argument Kordia and Woosh put forward in support of this submission is that the Vodafone/2degrees ICA is not public and it therefore cannot allow parties, other than parties to the agreement, to check and submit on the counter-factual.

223. As previously submitted on numerous occasions, Vodafone considers that the Vodafone/2degrees ICA is critical to the analysis of the counter-factual in the MTAS investigation because:

- the Commission has asserted that there are significant barriers to entry<sup>95</sup> and has considered other important issues such as the ability of a new entrant to compete, the appropriate price of mobile termination rates, and whether [ ] **VNZAPI** is appropriate. The Vodafone/2degrees ICA is highly relevant to the Commission's assessment of these factors;
- the prices contained in the Vodafone/2degrees ICA will be the prices payable by 2degrees and are therefore the rates which are likely to apply for mobile termination in the absence of regulation; and
- the prices contained in the Vodafone/2degrees ICA will be the prices payable by any other new entrant in the mobile market,<sup>96</sup> in the absence of regulation.

224. The reality is that there are only likely to be three mobile network operators in New Zealand in the foreseeable future. Accordingly, the rates available to the new entrant, who is in this case agitating for regulation, must be considered in any proper analysis.

225. Kordia and Woosh raise a concern that the bilateral nature of current commercial agreements may mean that the terms are not available to future potential access seekers wishing to enter the mobile market.<sup>97</sup> As we point out above, the terms in the Vodafone/2degrees ICA are now

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<sup>94</sup> See, for example, Kordia and Woosh, *op. cit.*, at pars [4.1] to [4.5]

<sup>95</sup> See, for example, Commerce Commission, *op. cit.*, at para [xxii]

<sup>96</sup> Vodafone has committed to making the terms of its interconnection deal with 2degrees available to any other new entrant into the mobile market in New Zealand if the MTM voice termination service does not become designated under the Act – see for example paragraph 254 of Vodafone's submission on the Draft Report dated 28 July 2009, and the media release from Vodafone of 29 July 2009

<sup>97</sup> See, for example, Kordia and Woosh, *op. cit.*, at para [4.5]

available to any other new entrant in the mobile market, so this point is no longer relevant.

226. The undertakings presented by Vodafone and Telecom are not the sole alternatives to regulation<sup>98</sup>. As stated in Vodafone's submission on the Draft Report dated 28 July 2009<sup>99</sup>, even if the Minister was to accept an undertaking put forward by Vodafone, 2degrees (and any other new mobile entrant) would still have available to it the option of retaining the prices contained in the Vodafone/2degrees ICA. It is therefore essential that these rates are appropriately assessed by the Commission as an alternative to regulation by including them in the Commission's counter-factual analysis.
227. Additionally, as previously submitted<sup>100</sup>, given the importance of the rates contained in the Vodafone/2degrees ICA to the Commission's assessment of whether to regulate MTM voice termination in New Zealand, Vodafone remains keen for the rates to be made publicly available. The confidentiality obligations contained in the Vodafone/2degrees ICA constrain Vodafone from publicly disclosing the rates and, despite Vodafone giving 2degrees permission to release the price terms and conditions of the agreement to the public, 2degrees continues to insist that the rates should not be made public. However, public disclosure would enable other parties to submit on the Commission's counter-factual analysis in an unconstrained and fully informed way. This would also dispel Kordia/Woosh's concerns that if a decision is made not to regulate and if they were then to seek to negotiate FTM terms, they would be doing so on an uninformed basis which could lead to Kordia/Woosh being "far worse off than the position if there was regulation". In any event, the Commission has recently decided that all relevant price related terms of current ICAs between parties may be provided to Nominated Counsel and certain other parties as Additional Protection Information.<sup>101</sup> This will enable parties to comment and submit on this information.
228. In summary, Vodafone remains of the view that the Commission must give the price terms contained in the Vodafone/2degrees ICA full consideration in its analysis of the counter-factual.

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<sup>98</sup> Telecom also submits that the appropriate counter-factual for the Commission to use includes the current MTR Deeds and commercial offerings by Vodafone (and Telecom) to 2degrees – see Telecom's submission on the Draft Report dated 28 July 2009, para 94

<sup>99</sup> Vodafone's submission on the Draft Report dated 28 July 2009, para 251

<sup>100</sup> Ibid, para 255

<sup>101</sup> Letter from Commerce Commission to interested parties, 13 August 2009.

## **7. Overseas and local experience suggests pass-through will be low under regulation**

229. In its analysis of FTM termination, the Commission rightly recognises that reducing FTM termination rates will have two conflicting effects for consumers:

- on the positive side, it should reduce the input costs for providers of FTM calls. The Commission also believes it will promote competition if it has the effect of lowering the price of mobile termination to equal its cost. In turn, these factors should have the effect of leading to benefits for fixed-line consumers – including reduced prices for FTM calls; and
- on the negative side, it should be expected to cause detriments to mobile consumers. A reduction in mobile termination revenue, without any corresponding reduction in input costs for mobile operators,<sup>102</sup> will change the incentives of mobile operators when it comes to setting retail mobile prices. This is a result of the two-sided nature of mobile termination, which the Commission correctly recognises in its Draft Report.<sup>103</sup> In particular, it can lead to higher prices for retail mobile consumers – especially low-spend pre-pay consumers who tend to receive more calls and SMS than they make. The extent of this effect is discussed further in Section 8 below.

230. Whether consumers as a whole are better or worse-off as a result of reduced FTM termination rates depends on which of these two effects is greater.

231. A key measure of the extent to which fixed-line consumers will benefit from reduced FTM termination rates is the extent of FTM pass-through – i.e. how much of reduced FTM termination rates leads to actual reductions in the retail price of FTM services.

232. FTM pass through is of particular importance in this matter because under existing arrangements, both Vodafone and Telecom have committed to pass through, in full, all reductions in FTM termination rates in reduced prices for retail FTM calls in Deeds provided to the Crown in 2007 (the MTR Deeds). This is important because this cannot be guaranteed under regulation which only applies to prices that can be set at the interconnection level. If

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<sup>102</sup> While reductions in MTM termination rates decrease both revenues and costs for a mobile operator, reductions in FTM termination rates only reduce revenues for a mobile operator. Of course, if a mobile operator is also an integrated fixed-line operator, it will receive lower FTM termination costs. The extent to which an integrated operator is better or worse off depends on the relative size of their market share in the fixed and mobile markets.

<sup>103</sup> Commerce Commission, *MTAS Draft Report*, para [134] at p. 51.

regulation were to occur, the 100 per cent pass-through obligations on Vodafone and Telecom set out in the MTR Deeds fall away.

233. In the absence of regulation, therefore, all reductions in mobile termination rates received by Vodafone and Telecom will be guaranteed to be passed-through in full to consumers. Under regulation, however, no such guarantee exists – it is left to market forces to determine whether pass through will occur.
234. The Commission assumes pass-through will range between 75 and 100 per cent under regulation – in other words, the market will ensure large amounts of pass-through naturally occur. The Commission also assumes that as termination rates decrease further and further, this will naturally correct imperfections in the fixed-line market so that competition will grow more intense in the fixed-line market over time. That is, reducing termination rates will make such a material impact on the extent of competition in the fixed-line market that it will by itself drive greater and greater levels of pass-through over time.
235. We do not share these views.
236. In response to the Commission’s Draft Report, TelstraClear notes that fixed-line consumers can benefit from reduced FTM termination rates in ways greater than simply reductions in retail FTM prices. In particular, it notes that:

*TelstraClear is concerned that a narrow view of pass-through, limited to the retail FTM/tolls calling market, is likely to ignore the commercial reality that services are purchased as bundles, rather than as a stand-alone service.*

...

*The ACCC has also recognised the importance of reduced MTAS rates to improve the level of competition more generally for fixed network services, which need not translate directly to reduced retail fixed-to-mobile call rates.<sup>104</sup>*

237. Further, it argues that:

*... it is inappropriate to focus solely on the extent of pass-through based on retail termination rates. At a retail level, mobile services are generally sold as a bundle. This will often include a handset, access and calling services. Likewise in the fixed market, mobile termination is not commonly purchased as a standalone service. The total*

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<sup>104</sup> TelstraClear, *Submission on Commerce Commission Draft Report*, 28 July 2009, pars [8] and [10] on p. 4.

*package price to the consumer reflects the total value of the bundle sold.*<sup>105</sup>

238. For its part, TUANZ believes that in the case of the FTM market, there is sufficient retail competition to ensure pass-through.<sup>106</sup>

***FTM services are provided as part of a bundle of fixed-line services***

239. Vodafone agrees with TelstraClear that retail FTM services are provided as part of a bundle that includes a broad range of fixed line services – including toll calls, international long distance calls, and increasingly broadband internet services. We believe it is important to bear this broader market definition for the market within which FTM services are provided in mind.

240. Recognising that FTM calls are provided as part of a broad bundle of fixed-line services serves to emphasise how trivial an impact further reductions in FTM termination rates will have on the overall input costs faced by fixed operators in New Zealand. Because of this, reductions in FTM termination rates are likely to have a trivial impact on the ability of fixed-line operators to compete in the fixed-line market. For this reason, we believe FTM termination rates are becoming so low now, and such a small part of the overall costs of running a fixed-line business, that further reductions over and above those set out in the undertakings and MTR Deeds is not likely to promote competition in the retail fixed-line market at all.

241. They are unlikely to be the straw that breaks the camel's back to suddenly unlock perfect competition in the fixed-line market as the Commission's hypothesis around lowering termination rates further and further over time seems to suppose.

***Evidence shows that high levels of pass-through are not occurring outside the commitments contained in the MTR Deeds***

242. The MTR Deeds have, without doubt, guaranteed significant benefits for fixed-line consumers. All reductions in FTM termination rates received by Vodafone and Telecom have been passed through in full to consumers since 2007.

243. In contrast, other fixed-line operators are simply not offering this degree of pass-through. Covec has analysed the restricted information data provided to the Commission by the parties during this investigation that relates to FTM revenues and call minutes. It notes that during the period between 2006 and 2008, the Commission's Draft Report shows that the FTM termination rate reduced by 9.26cpm, from 25.96cpm in 2006 to 16.7cpm in 2008. Over this same period, each of Orcon, CallPlus, WorldxChange and Woosh passed through ***significantly***

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<sup>105</sup> Ibid, para [16] at p. 6.

<sup>106</sup> TUANZ, *Submission from TUANZ – the Telecommunications Users Association of NZ*, 28 July 2009, p. 4.

**less than 75 per cent** of this reduction to their consumers. Indeed, Covec calculate that the weighted average price of FTM calls across these 4 operators decreased by only 2.76cpm over this period. This implies that those carriers that are not subject to the 100 per cent pass through commitments in the MTR Deeds are only passing through around **30 per cent** of reductions they receive in FTM termination rates.

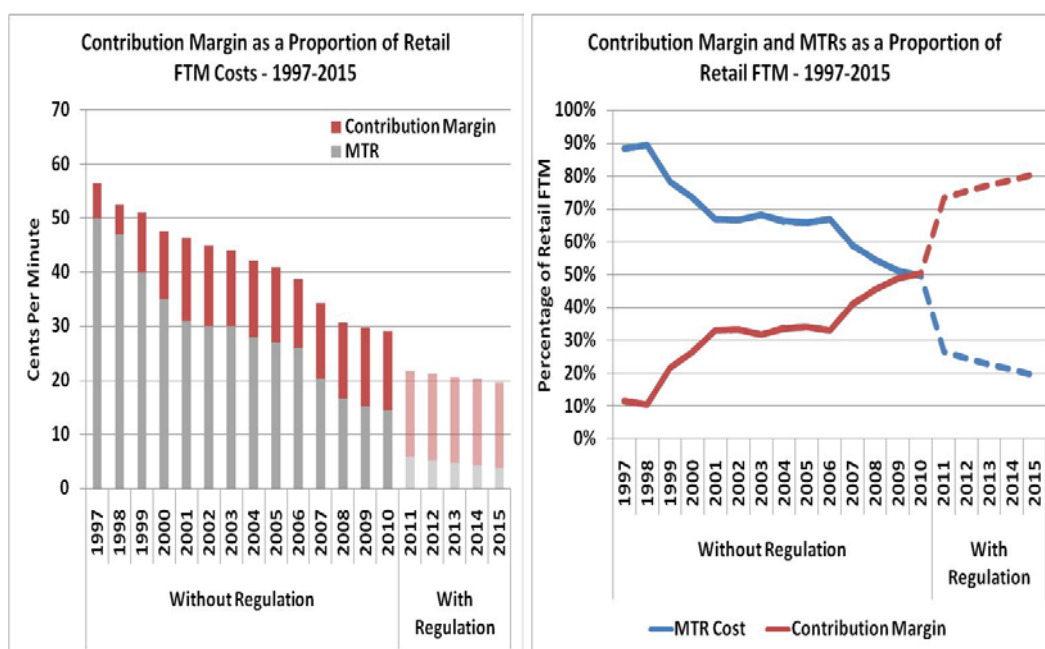
244. Vodafone finds this evidence staggering. Smaller fixed-line operators have been arguing for years that they cannot compete evenly in the fixed-line market because of high termination rates. They argue relief is needed so that they can compete on an even footing with Telecom. Yet the facts relating to how they respond when termination rates are reduced paint a very different picture:

- while FTM termination rates have fallen from 50cpm in 1997 to 16.7cpm in 2008, average retail FTM call prices have only fallen from 56.52cpm to 30.66cpm. In other words, while the price of FTM termination has fallen by 66.6 per cent, the margin enjoyed by fixed operators on FTM calls has increased by 114 per cent;
- in the last two years, fixed operators have taken a 9.26cpm reduction in FTM termination rates and pocketed 70 per cent of it for themselves;
- fixed-line operators are not even trying to use lower termination rates to apply competitive pressure to Telecom. While the average retail FTM price in the market was 30.66cpm in 2008, the smaller fixed-line operators were charging well above this at 34.4cpm; and
- small fixed-line operators are making a contribution margin of over 100 per cent above FTM termination rates. That is, while the average cost of FTM termination had fallen to 16.7cpm in 2008, the smaller operators were charging more than double this amount at 34.4 cpm.

245. No wonder smaller operators have pushed hard over the years for greater and greater decreases in FTM termination rates. It is a lobbying game that greatly fattens their margins. Of even more concern, the Commission itself seems happy to sit back and watch these margins grow. On its own analysis, it thinks that under regulation, the price of FTM calls will fall to 19.66cpm by 2015. Of this:

- 3.8cpm will represent the FTM termination rate;
- 3.96cpm will represent the non-termination costs of providing FTM calls; and
- the remaining 11.9cpm (or 60.5 per cent) will be pure margin.

246. There has got to be something wrong with regulation that knowingly transfers revenue between companies in a way that leads recipients of reduced costs to grow their margins to over 60 per cent.
247. The extent to which FTM contribution margins have increased over time as FTM termination rates have declined (and will continue to do so even under the Commission’s vision for the future) is illustrated in Figure 11 below.



**Figure 11 – Comparison of falling FTM mobile termination rates over time with growing fixed-line operator margins**

248. The extent of margin growth will be even greater if FTM pass-through shifts to around 40 per cent as Covec expects will be likely under regulation.

***In Australia the extent of FTM pass-through is decreasing!***

249. Vodafone finds it ironic that TelstraClear is seeking to draw attention away from the extent of FTM pass-through by arguing reductions in termination rates will benefit consumers in other ways. This is not surprising, as its parent company in Australia has been the major beneficiary of lower FTM termination rates. Since the ACCC first started actively regulating FTM termination rates in 2004, FTM termination rates have fallen 12cpm from 21cpm AUD to 9cpm AUD. The Telstra Annual Report<sup>107</sup> released on 13 August 2009 shows, however, that over the same period average retail FTM prices have fallen by only 2cpm (i.e. from 38.46cpm in the

<sup>107</sup> Telstra Corporation Limited Financial Results for the year ended 30 June 2009, 13 August 2009. Data relating to FTM call revenue and volumes can be found in the tables on page 39 and 40 of this report.

2004-05 financial year to only 36.43cpm in the 2008-09 financial year). Indeed, in the last financial year, FTM retail prices have **increased** from 35.84cpm to 36.43cpm.

250. This new data shows why the Commission here in New Zealand is being too bullish in its assumptions about FTM pass through under regulation. For its part, the ACCC has, after 5 years of regulation, decided to stop reducing FTM termination rates further. As we have noted many times before, it has recently stated that:<sup>108</sup>

*“... the ACCC is disappointed it appears there has been no significant reduction in [Australian] FTM prices has emerged (sic) despite earlier expectations....Indeed, the Commission has observed an increase in Telstra’s residential FTM retail prices since 2007.*

251. While the ACCC has been learning the hard lesson that reducing FTM termination rates does not achieve all that it thought it would, New Zealand has been achieving better results without formal regulation. In 2009:

- retail FTM prices are lower in New Zealand at 30.66cpm than they are in Australia (where Telstra charges on average 36.43AUDcpm or roughly 45.5 NZcpm at current exchange rates); and
- Telecom is passing through 100 per cent of decreases in FTM termination rates, while Telstra is actually increasing retail FTM prices.

252. We believe the evidence from Australia shows that better outcomes can be achieved under our current settings under the MTR Deeds than what we see in Australia under formal regulation. The ACCC too is now keenly observing the outcomes that are being achieved in New Zealand. As noted in our previous submissions, it is now indicating that:<sup>109</sup>

*The Commission considers that the approach adopted in New Zealand may also be appropriate. In New Zealand any reduction in mobile termination rates by any MNO is required to be passed through to fixed customers in full under voluntary deeds made between MNOs and the New Zealand Government.*

253. Given a massive and sudden decrease in FTM termination rates can have a number of detrimental impacts on retail mobile consumers, we believe the Commission must be convinced such action will generate substantially better outcomes for fixed-line consumers than those we have seen under the same types of regulatory action in Australia.

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<sup>108</sup> ACCC, *Draft MTAS Pricing Principles Determination and indicative prices for the period 1 January 2009 to 31 December 2011*, November 2008, p. 18.

<sup>109</sup> *Ibid*, p. 19.

## **Conclusions**

254. TUANZ often talks about the “rort” that is mobile termination rates. We think the rort is actually with the fixed-line operators rather than the mobile operators. Fixed-line operators are happy to take massive reductions in mobile termination rates and keep the vast majority of it for themselves.
255. The Commission is at risk of being seriously misled on this issue. FTM termination rates are now a small part of a fixed-line operator’s costs. Reducing them further will have no material impact on the state of competition in the fixed-line market. Small operators will not use these reductions to apply greater competitive pressure to Telecom. They have not done so in the past when termination rates have fallen by 35cpm from 50cpm in 1997 to now be at 15cpm. Telecom is still the dominant player in the fixed-line space, and this will not change if FTM termination falls further. Fixed operators will simply pocket most of the savings to grow margins as they have successfully been doing in New Zealand for many years.
256. The Commerce Commission is increasingly being made to look like Rachel Hunter in the famous Pantene shampoo commercials. Reducing FTM termination rates further “won’t generate 100 per cent pass through overnight, but it will happen”. Perhaps it believes if it reduces them one more time, 100 per cent pass-through will finally happen. It has not in the past when decreases have been at their greatest; it won’t going forward when decreases will be smaller.
257. The ACCC has woken up to this con-job and decided not to force lower reductions in FTM termination rates. It is about time the Commerce Commission did the same here in New Zealand and allowed the current arrangements – with their 100 per cent pass-through guarantee – to continue to ensure all reductions in FTM termination rates in the next few years are fully passed-through to consumers.

## 8. *The waterbed effect is real*

258. In its analysis of mobile termination, the Commission correctly recognises that the market for mobile termination is two-sided, and that it is important to consider the inter-relationships between MTAS and retail services. This is important because it recognises that when termination rates decrease, this can apply upward pressure on retail mobile prices.
259. Rhys Smith<sup>110</sup> doesn't believe that the waterbed effect exists and sites as evidence the existence of a Vodafone plan that gives excellent value to users in Australia:

*Vodafone Australia also claimed a waterbed effect would occur due to regulated decreases in MTAS and the resulting loss of revenue. The opposite has occurred. Recently, Vodafone Australia launched an "Unlimited Cap" plan. AU\$114 per month for unlimited calling (within Australia, including mobiles), unlimited SMS (worldwide), unlimited MMS (worldwide) and 2GB of data.*

260. TUANZ<sup>111</sup> are also sceptical of the waterbed effect:

*TUANZ has consistently rejected arguments about the Waterbed Effect.*

261. Although the waterbed effect is well established in theory (see for example Schiff (2008)<sup>112</sup>), it is not just a theoretical construct: it is supported by empirical evidence which is somewhat more sophisticated than Mr Smith's approach.
262. The Commerce Commission cites Genakos and Valletti<sup>113</sup> which shows that the waterbed effect exists and is large but not full. So most revenue lost through termination rate reduction is recovered. This is consistent with theory which posits that the waterbed effect will only be full in the case of perfect competition.
263. In addition to this, a recent study for Ofcom—Veronese and Pesendorfer (2009)<sup>114</sup>—shows how the waterbed effect has affected consumers. This is an empirical study that looks at how regulation of termination rates has affected usage, prices and penetration around the world. The most robust effect is that lower termination rates lead to lower levels of mobile phone

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<sup>110</sup> Rhys Smith, *Letter to Shane Kinley*, at p. 2.

<sup>111</sup> TUANZ, *op. cit.*, at p. 4.

<sup>112</sup> "The waterbed effect and price regulation". *Review of Network Economics*, 7: 392-414. Available from [http://www.rnejournal.com/artman2/uploads/1/schiff\\_RNE\\_sept08.pdf](http://www.rnejournal.com/artman2/uploads/1/schiff_RNE_sept08.pdf)

<sup>113</sup> "Testing the 'Waterbed' Effect in Mobile Telephony", Mimeo, available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1114856](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1114856)

<sup>114</sup> Wholesale Termination Regime, Termination Charge Levels and Mobile Industry Performance. A report for Ofcom available at: <http://www.ofcom.org.uk/consult/condocs/mobilecallterm/annex7.pdf>

penetration. A 1% cut in the termination rate leads to a 0.034% fall in penetration. Again this is consistent with what we would expect—that mobile prices will rise far enough to shift some users off the network.

264. Further, those customers who receive calls, but tend not to make them, will become less valuable to the networks and therefore will bear the brunt of the waterbed effect. How this will manifest itself is uncertain, but the US experience offers some guidance because of its RPP environment. As indicated elsewhere in this submission, conditions on US prepaid plans include much faster credit expiry; charging for ring time and unanswered calls; charges for incoming calls; and daily charges. If these measures are an efficient response to low MTRs, then some or all of them could be introduced in New Zealand as a response to regulation.

## ***Appendix One – Handover of traffic***

265. Telecom has submitted<sup>115</sup> that it believes it would be a very significant change to the networks of all carriers, to change from the “current handover model (at fixed network POIs)” to MSC handover.
266. Vodafone wishes to clarify that Telecom’s current handover model for FTM traffic suits Telecom, but is by no means a current industry handover model.
267. Vodafone has separate interconnect agreements, and separate physical handover links, with both Telecom Limited and Telecom Mobile Limited. Although the Telecom handover model is currently at fixed network POIs, the Telecom Mobile handover model is already based on MSC handover (both Telecom Mobile and Vodafone have MSCs at Auckland, Wellington and Christchurch).
268. 2degrees also has MSCs at Auckland, Wellington and Christchurch. Vodafone’s interconnect agreement, and physical handover links, with 2degrees are likewise already based on MSC handover.
269. It should also be noted that no physical network changes will be required to be made by Telecom for FTM calls from Telecom’s PSTN to Telecom Mobile users.
270. Vodafone’s standard interconnect terms and arrangements with other carriers are already based on MSC handover.
271. Vodafone agrees that MSC handover is the appropriate model. It can be used immediately without issue where MSC handover is already in place, or for new interconnects.
272. Vodafone believes that 3 months is a realistic timeframe to enable Telecom to reconfigure its handover arrangements for calls to Vodafone if it wants to (Telecom already has significant national transmission infrastructure in place).
273. Handover at MSCs should not be obligatory, but any regulated rate should be based on MSC handover. If an operator such as Telecom wishes to hand over FTM calls at fixed network POIs, Vodafone would be happy to provide a commercial termination price that includes both the MTAS termination service component from the MSC to the handset, plus the national transmission component from the handover point to the MSC, for which there is a competitive market.

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<sup>115</sup> Telecom, *MTAS Draft Report submission*, 28 July 2009, pars [116] – [117].

