



2degrees – Undertakings
Submission

2 October 2009

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1. Introduction

1. Two Degrees Mobile Limited (**2degrees**) offers the **attached** undertakings for the:
 - (a) 2degrees Fixed to Mobile Call Termination Service;
 - (b) 2degrees Mobile to Mobile Call Termination Service; and
 - (c) 2degrees Text Message Termination Service.
2. We have adopted the Vodafone *draft* undertakings of 6 May 2009 (**Vodafone drafts**) as the base documents for our undertakings and thank Vodafone for confirming its consent to this use. Telecom also gave us consent to use its undertaking of 28 July 2009 and we thank Telecom too.
3. We chose to adapt an existing undertaking in an effort to resolve non-price terms issues in an expeditious way, but this approach should not be seen as a wholesale endorsement of the approach taken to non-price terms.
4. We used the Vodafone drafts as they were drafted as *one-way access* undertakings (notwithstanding the acceptance deed's requirements of reciprocal prices), and are broken down clearly into the separate services (consistent with the format suggested at the Commission's MTAS conference). One-way access mirrors the approach of a regulated service and in our view should be used for the commercial undertakings. While we consider the Telecom undertaking to be well-drafted, it still contains a number of one-sided payment obligations which are inconsistent with interconnect rates being average rates (ie it de-averages or "tops up" an average) and usual commercial principles that parties bear their own costs when there is reciprocity.
5. We also **attach** mark up versions of the undertakings, to show the changes we have made to the Vodafone drafts.
6. In this brief submission we explain in greater detail the basis for the price terms and non-price terms we have chosen. On price terms:
 - (a) We have adopted BAK for SMS, consistent with the view expressed by many at the conference that that the cost of SMS termination is very low and that SMS traffic can be largely symmetrical with a BAK model (but we note it was acknowledged at the conference that traffic flows are retail driven).
 - (b) For voice termination (fixed and mobile) we have used the Australian TSLRIC number as a benchmark despite WIK Consultant's evidence that NZ costs would be lower. We have used the cost path suggested in para 3.31 of our submission of 28 July 2009 on the Draft Report.

7. The balance of this submission expands on the points noted above under the following sections:
- (a) Part 2: Price Terms – SMS;
 - (b) Part 3: Price Terms – Voice;
 - (c) Part 4: Comments on our amendments to the Vodafone drafts;
 - (d) Part 5: Comments on Telecom’s undertakings (assuming existing non-price terms are repeated).

2. Price Terms - SMS

1. We have consistently submitted that the cost of SMS termination is very close to zero.
2. We have also submitted that a useful cross-check was data costs, noting in para 6.19 of our 18 August 2009 cross submission that:

“As far as we know, neither the Commission nor the incumbents have attempted to estimate SMS costs by reference to data. An SMS is just data. A 160 character SMS consists of just 140 bytes of data.¹ The Vodafone casual rate for data is \$1 per day for up to 10 megabytes.² There are 10485760 bytes of data in 10 megabytes.³ The cost of one byte of data must be no more than 0.0000095c, so the cost of an SMS cannot exceed 0.0013c. Even if we include some additional level of signalling messaging associated with each SMS and assume that total data required per SMS is as high as 1Kb, then the cost of originating and termination cannot exceed 0.01c when compared to data retail prices.”

3. Our view that the costs of SMS termination are very close to zero was supported by the testimony of expert witnesses Dr Haucap and Professor Ralph at the conference.
4. Other industry players agreed with our view. Mr Walmsley noted (and Ms Stone agreed) that:

“...if you're looking at cost-based termination, which we are, then texting and SMS to me looks like if there's ever a service you're gonna do bill and keep on it looks like a candidate. If you're looking at it from a cost perspective, the cost has been set, it's nearly zero, it's more like e-mail than voice, it's not a real-time service etc.

So it looks like the cost of billing and going through the painful interconnect billings that we all go through and the disputes and God only knows what goes with them, it's an ideal candidate to say actually the cost of setting up the mechanisms between the two parties outweighs any cost associated with service so why the heck bother?”⁴

5. Vodafone has previously submitted that SMS traffic flows are “*roughly balanced*”, “*symmetrical*”, with any differences being “*trivial*”.⁵ Its expert, Dr Small, commented at the conference that SMS traffic is essentially balanced as it “*comes straight back again*”,⁶ and “*...in general...when someone sends a text is that they get one back*.”⁷ Dr Small also acknowledged that traffic flows were retail price driven.⁸
6. Similarly Mr York commented that “*...what made that offer [ie Telecom's \$10 text offer] sustainable was the texts coming back in the other way*”⁹ and that “*what's important here is the effective termination rate. So the nature of SMS is that when someone sends a text one comes back, so the net cost of engaging in sending an SMS is quite trivial*”. He then

¹ Farrell, N, 'SMS costs more than Hubble', 13 May 2008, *The Inquirer*, <http://www.theinquirer.net/inquirer/news/1046303/sms-costs-hubble>.

² Vodafone Media Release, 'Vodafone launches \$1 a day mobile broadband', 16 June 2008, <http://www.vodafone.co.nz/about/media-centre/2008-media-releases/mobile-internet.jsp>

³ <http://www.convertunits.com/from/megabyte/to/byte>.

⁴ MTAS Conference Transcript Day 1, lines 2 – 10; Ms Stone goes on to comment “*I'd agree...*” p113, line 15.

⁵ Vodafone, Submission on Draft Report, 28 July 2009, paras 29, 79, 82, 86 and 88.

⁶ P102, conference transcript, line 12.

⁷ Conference Transcript Day 1, p71.

⁸ Conference Transcript Day 1, p71, line 23

⁹ Conference Transcript Day 1, p48, lines 19, 20.

raised what seemed to be Vodafone's primary concern "...risks around spam if you go to bill and keep..."¹⁰. As submitted (and discussed at the conference) spam is dealt with under the Unsolicited Electronic Messages Act and Analysys Mason has concluded it is not an issue in BAK jurisdictions.¹¹ Further, and **critically** for present purposes, **both** the Vodafone drafts and Telecom's undertakings **explicitly provide for suspension/termination rights when spam could be an issue.**

7. The above supports the approach advocated for in paragraph 13.7 of our 18 August 2009 cross submission, where we commented that:

"Given that argument [namely that SMS traffic flows are "symmetrical", with any differences being "trivial"], the clearly very low cost and significance of SMS to the New Zealand market, it is self evident that SMS should be regulated on a BAK basis. The final Telco Report explicitly anticipated different pricing principles for different services. Clause 4 of Schedule 1 of the Act does as well."
[emphasis added]

8. It appears to have been accepted by many at the conference that this approach (ie BAK for text) would not lead to distortions.¹²
9. We also note that Telecom and Vodafone used (a variant of) BAK as recently as 2001.¹³ And, as previously submitted, Vodafone had no concerns about distortions when obtaining BAK for *Homezone*. Further, BAK avoids the need to have a re-setting of price as costs continue to drop further as they are expected to do. It also brings SMS into line with the vast majority (if not all) of SMS agreements between New Zealand carriers and their international partners.
10. The impact of retail prices on traffic flows must also be considered. Dr Small acknowledged at the conference that traffic was imbalanced because of retail plans like Best Mate and related plans in the text market.¹⁴ BAK removes the incentives for on-net off-net price differentials and the retail price floor set by excessive MTRs.
11. As stated at the conference we do not consider that setting a specified margin of out-of-balance traffic within which BAK is to apply is true BAK (a view echoed by others including Mr Walsmley).¹⁵ Indeed to have an arrangement that reverted to another measure would provide self-evident incentives for parties to encourage traffic to be out of balance in their favour, perhaps by raising retail prices for off-net traffic. To quote Mr Mellsop (in another context) "...incentives still matter".¹⁶
12. Accordingly, we offer the 2degrees Text Message Termination Service on a (pure) BAK basis.

¹⁰ Conference Transcript Day 1, pp104-105.

¹¹ See section 13 ('spam is a ridiculous basis to suggest high termination rates') of our cross submission of 18 August 2009, p58.

¹² Conference Transcript Day 1, see for example Mr Mellsop's comment that "SMS is probably easier to carve-out because you don't have the arbitrage issue I don't think" and "I can certainly see the argument for carving out SMS..." p112, and Dr Small "SMS compared to voice doesn't have those sort of re-file issues...I guess what I'm saying is you could probably think of SMS as being an independent decision" p111, and Mr Walsmley and Ms Stone, who commented "I'd agree, I think that you could regulate SMS at bill and keep and it wouldn't have a distortionary impact on other services" p113.

¹³ Conference Transcript Day 1, as noted by Mr Chignell: "...we did have a bill and keep arrangement at the beginning of the interconnect about 2001." p108, line 18.

¹⁴ Conference Transcript Day 1, p71, line 23.

¹⁵ As above, p113, line 11.

¹⁶ As above, p105, line 2.

3. Price Terms - Voice

1. As noted in paragraph 6 of section 1 (Introduction) both of our undertakings relating to voice termination (fixed and mobile) have used the Australian TSLRIC number as calculated by WIK-Consult (**WIK**) as a benchmark, notwithstanding WIK's view that NZ termination costs would be lower. We have used the cost path suggested in para 3.31 of our submission on 28 July 2009 on the Draft Report.
2. We have done this in order to achieve speedy resolution of this matter but note:
 - (a) As previously submitted, 2degrees consider that most of the benchmarks are likely to overstate TSLRIC measures.
 - (b) The comment above applies equally to Australia. As also previously submitted, we consider the allocation of common costs in the WIK model to be overly generous. Further, as WIK itself has noted, New Zealand costs would be expected to be lower than Australia's.
 - (c) We expect termination costs to reduce significantly in the near future as a result of a range of factors, including:
 - (i) reducing capital costs;
 - (ii) significantly increased used of data; and
 - (iii) over a slightly longer horizon, moves to NGN and similar networks (as referred to by Telecom in previous submissions).
 - (d) New Zealand lags behind the rest of the world in respect of regulation of termination rates. The EC recommends the narrower LRIC definition of costs (recognising the harm caused by excessive termination rates) and there is no evidence of harm from the very low TELRIC rates applied in the USA. In our view, the LRIC rate for New Zealand of 1.24 NZ cents calculated by Concept Economics (and derived from the WIK Australian model) is a better indicator of the true cost of providing voice termination services.
3. Like all parties, we can see that benchmarking is an imperfect process, but we recognise a need for some pragmatism. As noted at the conference (and in our earlier submissions), the Fletcher Report anticipated that benchmarking should be a relatively easy process. Discussing "*a benchmarking, or 'read-across' approach. ... calculated on the basis of forward-looking costs... as the basis for determining what the appropriate prices should be for New Zealand.*"¹⁷
4. The report acknowledged the need for judgement:

*"The Inquiry notes that a benchmarking approach would give a range of prices that could be ranked from lowest to highest by country or, as in the United States, by operator/state. A judgement would then be required as to where New Zealand should, at any time, fit within the ranking. The Inquiry recommends that **this judgement be made by the Commissioner on the basis***

¹⁷ Fletcher Report, p68.

of his/her best estimate of where New Zealand would fall if a full TSLRIC assessment were undertaken.”¹⁸

5. Accordingly, while we consider that Australian costs are a ceiling for New Zealand rates and that cost will drop significantly, we have opted for Australia as a relevant cost benchmark. It has the benefits of being a jurisdiction which is close economically and geographically, and is well-known to New Zealand. We also have the evidence of the Australian cost modellers, WIK. Dr Neu commented¹⁹ as follows at the conference:

*“First I would like to make the remark that in the latest ACCC decision there was a reference to the opinion of Telstra to the rate, the costs determined by the Wik model, and that reference was that **Telstra considered that rate to be just right, or be at the upper end of what that cost would be.** So we have a few opinions of at least one operator in Australia that considers the cost level determined by the model to be okay.*

...

*Now turning to the comparability issue, we have a sense that what we determined in Australia **may be an upper limit to what one would expect for New Zealand** for perhaps two or three reasons. The one is that **New Zealand has a higher population density.** In other words in Australia you certainly have a lot more areas that are coverage driven because of the sparsely populated areas that are covered but do not generate a lot of traffic and that cost is rolled into the cost of the rest of traffic. And that is in New Zealand more favourable.*

*The other is that in fact in - at least what we do know from the Vodafone network in New Zealand, **there is a higher number of subscribers per cell** than we had in the Australian case, and again that is a factor which makes for smaller cost.*

And the third factor is you have here 50%, or nearly 50% market share, and which of course is an important factor in cities where you usually have traffic driven cells and the cost is the lower the more densely, or more greater the traffic is, and for 50% market share that is supposedly higher than for 30% operators that's been modelled in Australia.

So in sum we would say that those indicators would point to cost models that are lower than we determined at the time for Australia. [emphasis added]

6. On that basis we consider it appropriate to use Australia as a ceiling for any undertaking.
7. We have proposed following the cost-path approach advocated in paragraphs 3.29 – 3.32 of our submission of 28 July 2009 on the Draft Report. There we commented that, as observed in Sweden, it seems more likely that costs will come down significantly over the next 2-3 years and more gradually thereafter. This would lead to the following approach:
- (a) A cost-path incorporating 15% reductions over the next two years (in line with the Swedish case), 10% reductions in 2012 and 2013 and 5% reductions thereafter.

¹⁸ As above, p68.

¹⁹ As above, p132.

- (b) Applying this to Australia, we calculated the following rates quoted in NZ cents (refer Table 1 of that submission, repeated below):

Table 1

	2009	2010	2011	2012	2013	2014	2015
Australia (NZ cents)	6.54	5.56	4.73	4.25	3.83	3.64	3.45

8. Accordingly, **we offer the rates in Table 1 in our revised undertakings.**
9. These rates can be seen as high when compared to another option canvassed (namely the average of the bottom 3 jurisdictions):

Table 2

	2009	2010	2011	2012	2013	2014	2015
Bottom 3 Average (NZ cents)	4.82	4.10	3.48	3.14	2.82	2.68	2.55

10. We see no basis for a glide path:
- (a) our view is that glide paths were designed in other jurisdictions to provide asymmetric prices in a new entrants' favour. No asymmetry is sought by 2degrees so there is no justification for a glide path;
 - (b) it delays the benefit of regulation (or proxies for regulation such as undertakings);
 - (c) it distorts competition and maintains the current subsidy of the incumbents to the detriment of competition and end users.
11. Our approach is consistent with the approach taken for price for termination on the fixed PSTN.
12. Consistent with international practice, prices are on a per second basis and individual call charges are not rounded up to the nearest whole cent.
13. Accordingly we have adopted the Australian rates, acknowledged by the cost modellers to be higher than New Zealand, with a cost path mirroring Sweden's for two years but then flattening.
14. The rates in our revised undertakings are a genuine attempt to achieve a speedy resolution so that the industry and consumers can benefit from increased competition as soon as possible. If these rates are to be accepted, and are in line with the rest of the industry, then the benefit of undertakings must be reflected in the speed of implementation.
15. As previously submitted, we consider the rates offered in our revised undertakings to be above cost. A regulated rate applied in early 2011 would in our view be below these rates. We therefore feel very strongly that if undertakings are to be accepted they must be implemented as early as possible in 2010.

4. Comments on our amendments to the Vodafone drafts

1. We have, as noted above, adopted the Vodafone draft undertakings in an effort to resolve non-price terms issues in an expeditious way, but as noted, this adoption should not be seen in any future debate as a wholesale endorsement of the approach taken to non-price terms.
2. Accordingly we have adopted the Vodafone drafts, to which we have limited our amendments as much as possible.
3. We have maintained the existing clause numbering but made the following key amendments:
 - (a) Schedule 3 Terms and Conditions:
 - (i) Amended the definition of the *Services Commencement Date* to provide that all services (including the FTM Call Termination Service) commence on provision of a properly completed and executed Deed of Acceptance. There is no justification for current above cost prices recorded in the FTM Deeds be permitted to continue. Vodafone's FTM deed also provides for immediate termination upon regulation of acceptance of an undertaking (clause 1.62).
 - (ii) Incorporated the standard access principles contained in clause 5, schedule 1 of the Telecommunications Act (which we note were included in the Telecom undertaking) (clause 2.15.1). This is important given the impact of clause 9 of schedule 3A (Part 2) of the Commerce Act 1986 does not apply for registered undertaking.
 - (iii) Amended the dispute resolution provisions to retain the right of either party to enforce the undertaking in any court of competent jurisdiction (clause 3).
 - (iv) Amended the early termination provisions such that a breach of more than one undertaking arising from a single event will be treated as a single breach for the purposes of termination on the basis of multiple remedied breach (clauses 6.1.2 and 6.1.3).
 - (v) Removed the 6 month stand down period following termination, which in our view could have the effect of severely limiting competition to the detriment of end users, particularly in circumstances where a third party acquires the network assets of an Access Seeker (clause 6.2).
 - (vi) Reduced the period for claiming charges omitted from earlier invoices from 12 months to 6 months (clause 18.16).
 - (b) Text Message Termination Service Undertaking
 - (i) Schedule 4: Inserted an obligation to notify the other party of matters giving rise to suspension (clauses 6.1, 6.2 and 6.3).
 - (ii) Schedule 4: Removed the right to terminate in circumstances where a right to suspend arises (clause 6.5).

- (iii) Schedule 4: Removed grounds for suspension of the Text Message Termination Service related to web-to text, text messages originating other than from a mobile phone and text messages sent for marketing purposes (clauses 6.2(b)(viii) to (x)).
- (c) FTM Call Termination Service Undertaking
 - (i) Schedule 4: Removed the pass-through obligations, consistent with the view expressed by many parties at the MTAS conference that pass-through may occur in a number of ways (clauses 3.2 to 3.5).
- (d) MTM Call Termination Service Undertaking
 - (i) We did not make any significant amendments to this Undertaking.

5. Comments on Telecom's undertakings (assuming existing non-price terms are repeated)

To confirm some of our comments regarding the Telecom undertaking we note as follows:

1. Telecom imposes a number of additional costs on the access seeker which are not industry standard, such as:
 - (a) Telecom's implementation costs for setting up or modifying call routing, billing and technical systems for new entrants - 3.1(b), Schedule 4;
 - (b) \$500 to install a connection to Handover Point - 3.1(c), Schedule 4;
 - (c) charges for interconnection links 3.1(g), Schedule 4;
 - (d) 3.1(i), Schedule 4 does not require prior approval of costs;

(On the basis of reciprocity, similar charges by the Access Seeker in 4.1(b) and (e), Schedule 4, should be deleted.)

2. Clause 4.2, Schedule 4 imposing the additional 3.5¢ charge should be deleted as previously submitted. This clause requires asymmetry in Telecom's favour by 3.5cpm if an Access Seeker does not connect to all of Telecom's 24 major LICAs, essentially amounting to an origination charge by Telecom. It requires an Access Seeker to match Telecom's network topology.
3. Telecom (and the access seeker) have the right to terminate the Text Message Service *immediately without liability* in a number of situations, (Clause 14.10, Appendix A) including:
 - (a) under clause 14.2, Appendix A where a subscriber or group of subscribers of the originating party sends more than 500 text messages to the terminating party's network within 24 hours
 - (b) under clause 14.3, Appendix A where a subscriber or group of subscribers of the terminating party receives more than 500 text messages from the originating party within 24 hours

the number can also be adjusted from 500 down to no less than 100 (clause 14.4, Appendix A).

4. Other miscellaneous comments include:
 - (a) Clause 17.4 restricts retail local calling offerings that an access seeker can make this potentially anti-competitive and yet would appear exempt from the Commerce Act under clause 9 of Schedule 3A of the Act (Part 2 of Commerce Act 1986 does not apply to registered undertakings).

(b) Clauses 21.10 and 21.13 provides for high interest rates – Bill Rate plus 5% for disputed amounts (*cf* Vodafone Bill Rate plus 1%); Bill Rate plus 10% for unpaid amounts (*cf* Vodafone Bill Rate plus 5%).

5. These comments are not intended to be comprehensive.