



**SCHEDULE 3 INVESTIGATION INTO
REGULATION OF MOBILE TERMINATION
ACCESS SERVICES**

**SUMBMSSION ACCOMPANYING REVISED
UNDERTAKING
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1 EXECUTIVE SUMMARY

- 1 Telecom appreciated the Commission's additional guidance on its expectations of any revised undertaking as part of the MTAS Investigation at the public meeting on 23 September 2009. We strongly support and welcome the Commission's comments that the undertakings process is an important part of the regulatory regime and that it wishes to do all it can to facilitate industry-driven solutions to regulatory issues such as this. In response, Telecom is pleased to present its revised undertaking (**Revised Undertaking**).
- 2 Telecom has reduced its proposed mobile termination rates (**MTRs**) by a further 24% from the undertaking submitted in July this year. This Revised Undertaking sees MTRs dropping by 62% over five years for both mobile-to-mobile (**MTM**) and fixed-to-mobile (**FTM**) calls. In addition, we have followed the Commission's guidance and our MTRs are based on second + second pricing from 1 July 2010.
- 3 Telecom has also significantly revised its pricing for SMS MTRs. We have taken into account the Commission's comments, and those of other parties at the MTAS conference, and propose that SMS MTRs are based on Bill and Keep (**BAK**) with an overage charge of 3 cpt at 7% to 12% overage and a charge of 8 cpt beyond 12% overage.
- 4 Furthermore, we have reduced the MTRs for internationally originated traffic handed over by domestic carriers at a Telecom MSC to align with the glide path for MTM and FTM calls. This is a 38% reduction from the standard rate of 24cpm and will create a significant immediate saving for Access Seekers coupled with the ongoing reductions as the glide path decreases. Aligning these rates also removes the arbitrage opportunities between domestic and internationally originated traffic and gives Access Seekers a uniform MTR for all mobile calls terminated on the Telecom mobile network.
- 5 We have made these changes because our strong preference is for an industry-based outcome. Telecom is keen to participate in facilitating an industry-based outcome which can give earlier certainty to the market – in preference to regulatory intervention and the significant increased costs of regulation and the regulatory process, delay in delivery of the services, and uncertainty that would necessarily result from it.
- 6 However, Telecom remains disappointed and concerned that the Commission's MTAS Investigation has undermined the regulatory certainty that was achieved under the MTR Deeds agreed by Telecom and Vodafone with the Government only two years ago.
- 7 We continue to hold the view that New Zealand's regulatory regime lags international best practice in several important structural areas – the most obvious of these being the lack of any merits review process. This is holding the

industry back and reducing investor confidence. Having merits review is important, as it provides investor confidence and certainty through accountability and discipline for high quality decision making, which would enable industry players to be more confident in putting undertakings forward than would otherwise be the case.

- 8 We look forward to the Commission’s workshop where we hope to further engage with the Commission and industry on ensuring an undertakings solution can be achieved.

2 PRICE TERMS

Lower MTRs for FTM and MTM

- 9 Telecom has lowered its MTRs for both FTM and MTM voice calls by 62% over five years as follows:

Date From:	Mobile Termination Rate for FTM and MTM
1 January 2010	12 cents on a minute + second basis
1 July 2010	12 cents on a second + second basis
1 January 2011	10 cents on a second + second basis
1 January 2012	9 cents on a second + second basis
1 January 2013	8 cents on a second + second basis
1 January 2014	7 cents on a second + second basis

- 10 Telecom has set the rates for the 2011 year to below those that will be applying in Australia at that time. We have also agreed to use a second + second basis for billing from 1 July 2010 which allows time for our billing systems to transition to this new construct. This change in billing basis by itself contributes a 19% reduction in MTRs. These rates are consistent with our view of where a properly calculated benchmark of international MTR prices would sit. Further, they are supported by an analysis of Telecom’s on-net prices for mobile calling. We have checked these prices against the overall average on-net prices of Telecom’s mobile services and these rates are below half of those retail-exclusive rates.

11 Telecom has made the following assumptions in relation to the parameters for the Cost Benefit Analysis (**CBA**), and on this basis concluded that the Revised Undertaking proposed is superior for end users relative to regulation at rates consistent with a properly measured benchmark:

- FTM pass-through assumption adopting the Commission's current approach as indicated at the public meeting of 23 September;
- FTM waterbed assumption of 50% as per the Commission's assumption in the Draft Report, but with allowance for elasticity effects within the mobile market as per John Small's recommended model improvement;
- The price elasticity of demand for FTM calling is assumed to be -0.4 as per Telecom's submissions;
- MTM waterbed assumption of a small negative correlation of MTR with mobile price - due to changes in competitive intensity;
- MTM traffic balance with Vodafone matching recent trends. MTM traffic balance with 2 Degrees of approximately equal flows in both directions;
- MTRs in 2010 continuing at the current rate of 15 cpm (minute + second) if regulation is recommended;
- International termination to mobile at current prevailing rates for 2010 if regulation is recommended. Changing these rates to match with domestic-originated traffic produces benefits for overseas end users and imposes net costs on New Zealand consumers because of the waterbed effect.

Glide path

12 While the Commission has expressed the preliminary view that a glide path would not be justified for regulation of MTRs, it noted that it has, in principle, no objection to the inclusion of a glide path in any revised undertaking but would expect any glide path to deliver equivalent benefits to end users when compared with regulation over the equivalent time period. The Commission advised that whether to include a glide path, and the length of any glide path, was a matter for Access Providers to consider.

13 There are a number of distinct periods Telecom has considered when proposing the profile of MTRs set out above:

- Telecom's Revised Undertaking provides for an immediate reduction in MTRs from the date of acceptance of the Undertaking by any Access Seeker. This avoids the potential delay and uncertainty associated with a regulatory

process. The rate places New Zealand in the bottom half of European MTRs, even after adjusting for minute + second billing.¹

- The implementation of a second + second billing basis is set for 1 July 2010. This is our assessment of the time that would be required to modify the billing system and conclude testing in relation to the changes required.
- Calendar year 2011 is the period during which Australia will have an MTAS rate of AUD0.09 per minute. This is the rate the ACCC considered to be the most appropriate to apply to the Australian mobile industry during that year. Telecom's figure of 10 cpm NZ is comfortably below this on any assessment of an exchange rate below AUD/NZD of 0.90.²
- Beyond this, Telecom has proposed more of a cost path than a glide path. This is our assessment of likely costs in the years in question. The figure for 2014 is 62% below current rates allowing for the billing basis change.

Change from minute + second to second + second billing

- 14 The Commission has indicated that it has concerns with the minute + second pricing structure as it considers that, under access principle 2 in the Telecommunications Act, any undertaking must be consistent with international best practice. As second + second pricing is the predominant method of pricing in other jurisdictions, the Commission considers this approach should be adopted in any revised undertaking.
- 15 As set out above, Telecom has adopted second + second pricing in its Revised Undertaking from 1 July 2010.
- 16 As Telecom has noted in its submissions, second + second pricing is a less efficient means of recovering the costs of call setup and of network time costs such as ringing time and engaged numbers. However, this is the approach which has been used elsewhere where these costs are grossed up into a second + second rate. Accordingly, Telecom has adopted this approach as the Commission suggested.

Bill and Keep for SMS with overage for out of balance traffic

- 17 The Commission, at its public meeting, noted that the majority of views expressed at the MTAS conference supported some form of BAK approach for SMS and that it considers these majority views are an appropriate basis for the Commission's assessment.

¹ $12.0 * 1.23 * 0.49$ EUR/NZD is 7.2 cpm Euro against an average and median of around 8 cpm Euro.

² As compared to the current value of AUD0.82

- 18 Telecom has taken into account the Commission’s views and proposes that SMS MTRs are based on BAK pricing with an overage charge of 3 cpt at 7% to 12% overage and a charge of 8 cpt beyond 12% overage.
- 19 At the public meeting, Vodafone asked the Commission whether it had given further thought to what the pricing principle should be if a party went outside the out of balance limit. The Commission stated that in the Draft Report TSLRIC was the final pricing principle or BAK, so TSLRIC would be the appropriate benchmark.
- 20 Telecom has carefully considered the Commission’s view that the pricing principle for out of balance traffic should be TSLRIC based. However, for the following reasons, it is not appropriate to have an overage charge at TSLRIC in a Hybrid BAK model. This is because SMS messages sent within the out-of-balance threshold are being sent for free, meaning that the average price paid for SMS will always be below TSLRIC. For example, if half of the SMS were free and half at TSLRIC, then the effective rate would be half of the TSLRIC rate. Telecom’s proposal allows for this effect by having an escalating out-of-balance charge. The average rate is at TSLRIC with a traffic balance of around 111%. This table provides an illustration of how this method works:

SMS inwards	SMS outwards	Excess	Charge	Charge/Excess
100	100	0	0	-
100	101	1	0	-
100	102	2	0	-
100	103	3	0	-
100	104	4	0	-
100	105	5	0	-
100	106	6	0	-
100	107	7	0	-
100	108	8	3	0.38
100	109	9	6	0.67
100	110	10	9	0.90
100	111	11	12	1.09
100	112	12	15	1.25
100	113	13	23	1.77
100	114	14	31	2.21
100	115	15	39	2.60
100	116	16	47	2.94
100	117	17	55	3.24
100	118	18	63	3.50
100	119	19	71	3.74
100	120	20	79	3.95

- 21 The example assumes that a carrier receives 100 SMS per month and calculates the charges that would apply for various different values of outwards SMS per month. The excess is the extent to which the outwards SMS have exceeded the inwards. For up to 7% the charge is zero. Between 7% and 12% the charge is 3 cpt. Beyond 12% the charge for further SMS is 8 cpt. The charge column shows the number of cents paid for the month. The final column calculates the effective rate as the charge divided by the number of out-of-balance texts sent. For example, the bottom row shows that the average is 3.95 cpt for 20% out of balance – this would be extremely unusual on an ongoing basis
- 22 We set out an additional example of how this model would work: If Telecom handed over 55 SMS and the Access Seeker handed over 45 SMS, the size of the imbalance would be 22.2%. The charge to Telecom for the first 7% of the 22% imbalance of Telecom SMS (3 texts) would be nil. Telecom SMS representing between 7% and 12% (2 texts) would be charged to Telecom at 3 cents per SMS. Telecom SMS representing the last 10.2% of the 22.2% imbalance (5 texts) would be charged to Telecom at 8 cents per SMS.
- 23 The reason for having the charges escalate is to provide a disincentive for artificial traffic such as spam.³ The final rate has been set at the retail price 2 Degrees currently charges for SMS (excluding GST), so it would not be out of pocket (although it would have zero margin) even if there were to be a material net flow SMS traffic from 2 Degrees.

International MTRs for domestic traffic

- 24 Our Revised Undertaking applies to domestic carriers. The MTR included in our Revised Undertaking for termination of all Mobile Calls handed over by domestic carriers at the MSC (including internationally originated or VoIP calls) is at the glide path rates set out in paragraph 9 above.
- 25 We have changed the definition of “Mobile Call” so that a “Mobile Call” is simply any call handed over to Telecom or an Access Seeker with a mobile network for which the called number is a mobile number on that party’s mobile network. The “Mobile Call” definition is now agnostic as to origination point (i.e. offshore) and the network or technology used to originate the call. This change has rendered redundant many of the distinctions around fixed networks and origination points made in our previous undertaking so there are a significant number of amendments that reflect that, for example, the deletion of the definitions of “Local Originator” and “Mobile Originator” and the deletion of the exclusion in clause 1.1 of Schedule 4 regarding calls that originate outside the other carriers network.

³ Telecom does not represent that this charge will reduce text bullying.

NON-PRICE TERMS

Limited opportunity to withdraw undertaking

- 26 As Telecom has previously noted, where there are three Access Providers that may each provide an undertaking, there are a number of scenarios which may result. For example, the Commission may accept one undertaking and regulate the other two Access Providers or accept two undertakings and not regulate at all – there is a reasonably wide spectrum of potential outcomes. However, where the Commission accepts only one undertaking it means that the other two Access Providers may have another 12-18 months before the MTRs for their networks are regulated. This raises a concern for Telecom.
- 27 While Telecom is keen to participate in the undertakings process to achieve an industry led outcome, we are concerned at the commercial risk to Telecom if it were the only party to provide an undertaking that was capable of acceptance by the Commission. We have always maintained a clear view that MTRs must remain symmetrical across the mobile industry, and this was a key point of principle communicated by the Commission in its recent guidance on this issue.
- 28 Telecom considers it clear under the Telecommunications Act that an undertaking can be withdrawn before the Commission accepts it. However, we also recognise that it is important that withdrawal of an undertaking does not compromise the Commission's processes where, for example, it is withdrawn late in the process. Accordingly, for transparency, we have made it clear in our Revised Undertaking that after the workshop (or the Commission's decision not to hold a workshop) Telecom will make a quick decision whether to leave our Revised Undertaking on the table. This is not, however, a "conditional term" in our Revised Undertaking and is therefore consistent with the scheme of the Telecommunications Act.

Handover

- 29 In light of the Commission's preference for parties to handover traffic at the MSC, Telecom has removed the 3.5c origination charge that was incurred where a mobile network operator did not have a local point of interconnect for Telecom to hand over where a call originated on Telecom's fixed network. Our Revised Undertaking now requires Telecom to hand over FTM traffic at the destination carrier's MSC without deduction for the transport component. This also means that fixed network carriers whose end users call Telecom's mobile network will be obliged to get those calls to the Telecom MSC for handover, or purchase a commercial transport service to carry the calls from their local point of handover to the Telecom MSC.
- 30 Parties originating both FTM and MTM traffic and handing it over to Telecom's MSC can either provision their own interconnect links (on a 2Mbit/s basis), or purchase a commercial links service from Telecom. There will be a standard

connection charge of \$125 per month for each 2Mbit/s link to hand traffic over to Telecom, whether self provisioned or purchased from Telecom.