



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

**SUBMISSION ACCOMPANYING REVISED
UNDERTAKING
PUBLIC VERSION**

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EXECUTIVE SUMMARY

- 1 In January 2009, Telecom submitted an undertaking to the Commission (**Initial Telecom Undertaking**). The Commission provided a number of comments on that undertaking. This paper sets out the context for Telecom's revised undertaking (**Amended Undertaking**) and addresses the Commission's preliminary comments.
- 2 The Commission has considered termination rates a number of times over the past 5 years, culminating with a deed reached between Telecom and the Government covering fixed-to-mobile (**FTM**) termination rates in April 2007 (**MTR Deed**). That deed is barely two years old, and has been cited internationally as providing superior end-user outcomes than pure regulation of wholesale termination rates, yet the Commission is again investigating such regulation.
- 3 The existence of the MTR Deed and competitive nature of the relevant markets give rise to a question around the need for the Commission's current investigation. At a minimum, the dynamic and innovative nature of the markets suggests the Commission should be cautious in proposing any further intervention. Since the start of this investigation alone, New Zealand Communications (**NZ Communications**) has continued to build its network, Telecom has announced the launch of its new XT mobile network, Vodafone has announced the launch of an expansion of its 3G network, and a number of regulators internationally have updated their views on termination rates.
- 4 With these developments as context, and having regard to the serious concerns we hold with the Commission's preliminary benchmarking of MTRs internationally, Telecom has made some amendments to the non-price terms of the Initial Telecom Undertaking but no amendments to the price terms. We continue to believe that the price terms proposed in our Initial Telecom Undertaking are appropriate.

Price Terms

- 5 The following features of the price benchmarking provided in the Commission's preliminary comments on the Initial Telecom Undertaking, set out in the Commission's letter of 25 March 2009 (**MTAS Comments Letter**) mean that, in our view, little weight can be placed on its benchmarking of MTRs:
 - (a) Use of theoretical TSLRIC models rather than actual rates set by overseas regulators – we have significant concerns about the Commission's use of theoretical modelling instead of actual regulated rates in its benchmarking. The effect is to artificially lower the benchmark and provide a misleading picture of international practice;
 - (b) Use of a blended 10 year average/purchasing power parity (**PPP**) exchange rate – which directly contradicts the purer approach of a simple 10 year

exchange rate average the Commission has taken in other decisions such as sub-loop unbundling; and

- (c) Selection of the median of the benchmarked sample as opposed to the 75th percentile – which produces rates well out of kilter with the most recent international determinations such as from the UK where a rate of NZD 14.1 cents has been set.¹

6 Further, since the Commission's initial benchmarking exercise, a number of overseas regulators have set cost-based, forward looking mobile termination rates (**MTRs**). We have provided updated benchmarking taking account of this new data and our proposed rates and glide path (15 cpm reducing to 10 cpm) compare well with actual prices in comparable countries.

7 Finally, we continue to believe that the structural features of the pricing proposed in the Initial Telecom Undertaking are appropriate. In particular, a glide path for MTRs as proposed is:

- (a) Consistent with international regulatory practice;
- (b) In the long term interest of end users; and
- (c) Reasonable and appropriate in the context of mobile termination access services (**MTAS**) in New Zealand.

A glide path is absolutely necessary to mitigate the potentially harmful effects to mobile customers in New Zealand of a sudden, significant removal of termination revenues from the mobile sector.

Non-price terms

8 In light of the Commission's preliminary comments set out in the MTAS Comments Letter, Telecom has responded to the Commission's comments and made a number of changes to the non-price terms.

9 While Vodafone's draft undertakings have a different structure, their fundamental commercial terms are quite compatible with our Initial Telecom Undertaking. In addition, we have made changes to ensure that the non-price terms better accord with those proposed by Vodafone in its undertakings. Accordingly, we consider that the terms of our Amended Undertaking are sufficiently similar to Vodafone's terms such that acceptance of it is a realistic and appropriate way forward. Moreover, we believe further alignment is possible and we support Vodafone's suggestion of a Commission workshop focused on reconciling undertakings. A copy of our Amended Undertaking is attached to this submission.

BACKGROUND

10 On 6 November 2008 the Commission announced its decision to investigate the mobile termination access service (**MTAS Investigation**) incorporating:

¹ Using the 10 year average exchange rate. This rate converts to NZD 12.7 cents using the Commission's blended 10 year average /PPP exchange rate.

- (a) mobile-to-mobile (**MTM**) voice termination;
 - (b) FTM voice termination; and
 - (c) SMS termination.
- 11 On 12 January 2009 Telecom submitted the Initial Telecom Undertaking covering all three aspects of the MTAS Investigation under Schedule 3A of the Telecommunications Act 2001 (**Act**). Undertakings were also submitted by Vodafone and NZ Communications.
- 12 By way of its MTAS Comments Letter, the Commission provided Telecom, Vodafone and NZ Communications with comments to consider in submitting revised undertakings in relation to the relevant MTAS services.
- 13 The Commission commented that any revised undertakings were required to be submitted by 22 April 2009 and that these would be the final undertakings considered for recommendation of acceptance by the Commission. The deadline was later extended to 6 May 2009.
- 14 The Commission subsequently entered into correspondence with Telecom and Vodafone in relation to procedural matters concerning the MTAS Investigation and has agreed to consider further revised undertakings after the release of the draft report. Telecom supports and appreciates the Commission's decision in this regard. We consider that following the draft report, Access Providers will be better placed to fully consider whether any additional changes to their undertakings may be appropriate as an alternative to regulation.

COMMISSION'S COMMENTS: PRICE TERMS

No changes to price terms

- 15 Telecom has carefully considered the Commission's comments on the Initial Telecom Undertaking. However, for the reasons set out below, Telecom has retained the price terms that were previously submitted.

Initial comments on the Commission's proposed approach to international benchmarking

- 16 In the MTAS Comments Letter, the Commission sets out its preliminary view that the MTRs provided in both the Initial Telecom Undertaking, and in Vodafone's undertakings, are significantly above estimated forward looking cost base rates derived from regulatory cost models in other countries.
- 17 The Commission has not yet decided whether to regulate MTAS, but rather is engaging in an exercise to determine if suitable undertakings by Access Providers can substitute for any such regulatory intervention. It is appropriate in this context for the Commission to form a preliminary view as to an acceptable outcome; a view which is more fully informed by the consultation process. Telecom welcomes the opportunity to participate in this process. However, Telecom has serious concerns with the approach taken by the Commission in formulating that preliminary view of the cost based MTR target for undertakings.

- 18 Based on its benchmarking, the Commission offers a preliminary view that the current cost-based MTR could be as low as NZ\$ 0.07/min for MTM and FTM termination and NZ\$ 0.01 for SMS. In addition the Commission signals its expectation that any revised undertakings will need to offer reduced MTRs at or close to the level of the Commission's benchmarks based on the median of benchmarked information.
- 19 A more reliable estimate of an appropriate cost based MTR target for MTM and FTM termination is available when proper account is taken of the actual cost-based rates determined by regulators, the need to adjust for the asymmetric risk of regulatory error in the undertakings process, and the outcome of the Commission's benchmarking. For the reasons set out below, this estimate should form the basis of the Commission's preliminary view and expectations of the undertakings process.
- 20 Telecom has also engaged NERA to review and comment on the Commission's benchmarking process. NERA has prepared a report which contains a detailed analysis of the Commission's benchmarking and benchmarks actual cost-based MTR decisions reached by regulators (**NERA Report**). The NERA Report is attached to this submission.

Changed benchmarking methodology

- 21 Analysis of Appendix 1 of the MTAS Comments Letter shows that the Commission has adopted a benchmarking methodology which differs from that used in the FTM and roaming investigations conducted in 2006 and 2008 respectively. In fact, the Commission has benchmarked against the outputs of a theoretical form of TSLRIC modelling that could not be achieved in reality by any operator, rather than the final cost-based rates adopted by overseas regulators after proper consideration and consultation. In addition, the Commission has determined that the median of this sample is more appropriate than the selection of the 75th percentile. The Commission has not set out the reasons for this significant change in its approach.
- 22 Presumably in order to signal its expectations to participants, the Commission has assumed that TSLRIC is the cost measure that will be used in any future regulation of MTRs in carrying out its benchmarking exercise. This is not necessarily the case and consultation on this point is appropriate.
- 23 In following paragraphs, Telecom examines the Commission's benchmarking and compares the outcome of benchmarking the theoretical TSLRIC models with an analysis of the actual cost-based rates applied by regulators in comparable jurisdictions. These are a more appropriate measure of cost to inform a preliminary view for the purposes of considering the undertakings.

Concern with Commission's benchmarking

- 24 The Commission has used outputs from theoretical cost models. We also note that the cost models used by the Commission, with one exception, relate solely to 2G network costs, while in New Zealand both Telecom and Vodafone are operating both 2G and 3G networks. While a 3G network may have a lower marginal cost than a 2G network, it is not necessarily the case that the

long run incremental cost will be lower; a potential result which cannot be assumed. Other factual differences in the choices of inputs and assumptions in a TSLRIC model may also impact on the outcome.

- 25 Factual differences aside, the outputs of TSLRIC modelling will typically lead, after consultation and review, to actual cost-based regulated prices which differ materially from the modelled outcome.
- 26 As the NERA Report shows, in many of the jurisdictions included in the Commission's benchmarking the domestic regulators have considered the output of TSLRIC modelling and have adjusted it to reach final cost-based rates following detailed consideration of the models and appropriate consultation.
- 27 This alone should indicate to the Commission that there may be highly relevant information which the overseas regulators have taken into account in their decisions which is not fully reflected in the modelling. This means that it would be unwise to assume, at least in the absence of fuller information, that the output of those models is a valid proxy for the optimal regulatory outcome in New Zealand.
- 28 The Commission's benchmarking approach is further inconsistent with the initial pricing principle approach to benchmarking for designated access services in the Act. In Schedule 1 of the Act, "benchmarking against prices for similar services in comparable countries that use a forward looking cost-based pricing method" is prescribed as the initial pricing principle for designated access services similar to MTAS. Benchmarking against theoretical TSLRIC models is a wholly different exercise and of limited value in indicating MTRs that are suitable in the context of undertakings, especially where the appropriateness of TSLRIC as the cost measure for regulated pricing in this case has not been fully investigated.
- 29 The conclusion that a TSLRIC approach is appropriate could only be reached after the Commission determines that regulation is required, carries out a full cost benefit analysis, and carries out a process of consultation that takes into account the full effect of such a change on fixed and mobile retail markets.
- 30 It is inappropriate for the Commission, for the purpose of the undertakings process, to suggest appropriate cost-based rates for MTRs in New Zealand solely based on multi-jurisdictional TSLRIC modelling particularly in the face of evidence that many of the regulators, following careful consideration, have chosen to adjust those model outputs for regulatory purposes.
- 31 The Commission, by forming a preliminary view based on these modelled rates, anticipates a final outcome which is unlikely to be a realistic reflection of actual cost based MTRs in the case of a final pricing principle process. This would be the case, even if the decision to regulate was to be a final outcome of the undertakings process.
- 32 A far more valuable exercise for the Commission, in forming a preliminary view of appropriate MTRs for the purposes of undertakings, would be to

consider the actual cost based rates applied by regulators in comparable jurisdictions. The NERA Report sets out a more detailed review of the Commission's benchmarking methodology. For the purposes of comparison, the NZD equivalent figures set out below use the Commission's 10 year average/PPP blended exchange rate.

- 33 As the NERA Report shows, when actual cost-based rates set by regulators are considered, the median of those rates, at NZ\$ 0.0984 is significantly higher than the Commission's TSLRIC model based median of NZ\$ 0.0694. In comparison, at NZ\$0.1040, the 75th percentile of the Commission's benchmarked outcome allowing for the asymmetric risk of regulatory error (which we discuss in more detail below), is slightly above the lower end of the median range of actual cost-based rates set by regulators of NZ\$ 0.0984, and below the lower end of the 75th percentile range of those rates at 0.1221. Specifically:
- (a) The 75th percentile of the TSLRIC cost model rates benchmarked by the Commission is NZ\$ 0.1040; and
 - (b) The 75th percentile of actual cost based rates as set by regulators sits between NZ\$ 0.1221 and NZ\$ 0.1481.²
- 34 When benchmarking data is considered with a view to avoiding the risk of regulatory error in both cases, we see that the Commission's results based on a sample of modelled TSLRIC outputs at the 75th percentile, converge with the actual outcomes of regulatory processes at the 75th percentile. The benchmark data strongly suggests that the Commission's preliminary view of cost-based MTRs should properly fall between NZ\$ 0.1221 and NZ\$ 0.1481 prior to adjusting for the effect of using the 10 year average exchange rate. This range is also supported by the results produced in countries which have applied benchmarking methodologies – their rates (on the same basis) are approximately NZ\$ 0.13.
- 35 In order to enable the Commission to make comparison we have not sought to present this data using the 10 year average exchange rate. To put this in perspective, the most recent international determination is from the UK, where (based on the 10 year average exchange rate) a rate of NZ\$ 0.14 cents has been set. This rate converts to NZ\$ 12.7 cents using the Commission's blended 10 year average /PPP exchange rate.
- 36 Based on the glide path process set out in Telecom's undertaking, MTRs move from NZ\$ 0.15 initially and reach NZ\$ 0.10 by the end of the glide path period. These outcomes accord with the benchmarking. Telecom submits that the Commission should reconsider its preliminary view on the appropriate cost-based MTR target for the reasons set out above.

² These ranges arises since in some regulators have chosen to apply differential rates for specific reasons.

Currency conversion methodology

- 37 Telecom is also concerned by the Commission's approach to currency conversion. The Commission has not provided any reason for its change of methodology from the 10 year average exchange rate approach used in the FTM and roaming investigations as well as in other decisions the Commission is currently engaged in such as the Sub-loop services standard terms determination. The approach used in the currency conversion of the dataset driving the Commission's preliminary view produces a composite which equally weights the 10 year average exchange rate with the 2007 PPP calculation. It is difficult to find any justification for this approach.
- 38 The use of a PPP approach is dependent on the validity of the underlying hypothesis that there is, in fact, a constant long-run real exchange rate equilibrium. There is no clear consensus in the academic literature that this hypothesis is valid and significant evidence exists suggesting that it is not. This alone suggests that the PPP approach should be used with care. Any blending of these two approaches can only increase the risk of material error in estimating the resulting exchange rate.
- 39 The use of the 10 year average exchange rate is a better estimator of the underlying exchange rate than the hybrid currency conversion methodology proposed by the Commission. However, to enable better comparability between the benchmarking data set out in the MTAS Comments Letter and in the NERA Report, the Commission's rates have been applied.

Commission's preliminary view increases risk of regulatory error

- 40 Telecom is concerned that the Commission's approach to formulating a preliminary view of acceptable MTRs will give rise to a significantly higher risk of regulatory error in the course of the undertakings process. As the Commission is aware, TSLRIC cost modelling relies on idealised assumptions which give rise to outcomes that differ, often dramatically, from the actual cost outcomes for network operators. To influence the undertakings process due to a preliminary view based on benchmarking TSLRIC models rather than actual regulated cost based rates would give rise to a higher than normal risk of regulatory error, particularly when the Commission is using the outputs of foreign models that have not been adopted by the home regulator.
- 41 As noted above, with one exception, the TSLRIC models used by the Commission relate to 2G networks, while in New Zealand Telecom and Vodafone are both operating (and are both in the late stages of transitioning from) 2G and 3G networks.³ Again, the Commission's approach signals a heightened risk of regulatory error.

³ Telecom notes that Ofcom/UKCC came up with a higher rate for the pure 3G network of H3G; a rate which is more likely to reflect Telecom's forward-looking costs given the common technology and similarity of network size.

Use of 75th percentile rather than median observation

- 42 In the light of the significantly increased potential for regulatory error, the Commission's decision to select the median of its sample rather than to use the 75th percentile is surprising. The Commission has not provided reasons for its choice in this regard.
- 43 The Commission has previously acknowledged the fact that there is an asymmetric risk of regulatory error in relation to decision-making. Regulatory error affects all market participants with results that flow through to end users. The consequences of the Commission determining, even as a preliminary view, an erroneous target for a suitable MTR are significant. The risk is that market participants are incentivised to submit undertakings which under-price MTRs seeking to avoid the cost and other impacts of regulation by the Commission. Such an outcome has the potential to reduce the level of network investment and impacts on competition by network operators.
- 44 As noted by the Commission in the past, the risk of regulatory error is asymmetric – the impact of under-pricing far outweighs the effect of over-pricing. The use of the 75th percentile rather than the median of a benchmarking dataset is acknowledged as a means to avoid the asymmetric risk of regulatory error and has formed part of the Commission's past practice.⁴
- 45 Accordingly, the Commission's preliminary view is best supported by a consideration of the 75th percentile point of two benchmark datasets:
- (a) The first, the Commission's analysis of TSLRIC model outputs; and
 - (b) The second, as set out in the NERA submission, which reflects the cost based rates determined by regulators after fuller consultation. Even if the Commission determines that it should only rely on the benchmarking set out in the Appendix to the MTAS Comments Letter, the Commission should select the 75th percentile of the observations rather than the median in order to mitigate the asymmetric risk of regulatory error in the outcome of the undertakings process.

Conclusions on benchmarking

- 46 The preliminary view proposed by the Commission in the MTAS Comments Letter does not take proper account of all relevant factors and the selection of the median of its benchmarking should not be used to indicate an appropriate target for MTRs in the undertakings process. In summary, the following features of the Commission's benchmarking set out in the Appendix to the MTAS Comments Letter raise significant concern for Telecom:
- (a) Exclusive use of theoretical TSLRIC models rather than considering actual cost-based rates set by overseas regulators;

⁴ See for example Decision 477 and Decision 497.

- (b) Use of a blended 10 year average/PPP exchange rate rather than a simple 10 year average; and
 - (c) Selection of the median of the benchmarked sample as opposed to the 75th percentile.
- 47 The NERA Report supports Telecom's position that the MTRs proposed in its undertaking are consistent with robust international benchmarking. The 75th percentile data point of benchmarking the actual cost based rates set by overseas regulators represents the best comparison point for where a regulated rate in New Zealand might optimally be set. The data presents a more reliable estimate of cost-based MTRs and strongly suggests that the Commission should amend its preliminary view as to the appropriate MTR. For these reasons, Telecom has not adjusted the MTRs submitted in the Initial Telecom Undertaking.

Glide paths

- 48 The Commission has stated that its preliminary view is that there is no justification for the MTR glide paths proposed by both Telecom and Vodafone.⁵ However, this approach is at odds with the approaches used in the majority of the countries which the Commission uses as benchmarks. As the NERA Report shows, the use of glide paths is both accepted and applied by many of the regulators in the jurisdictions cited by the Commission.
- 49 Glide paths are a sound approach to regulating rates over an extended (multi-year) period for a number of reasons including that they:
- (a) Recognise that an immediate reduction in rates can cause disruption to the business plans of mobile operators, affect demand patterns, and interfere with investment incentives. These outcomes will have a flow-on effect which has no long-term benefit for end users;
 - (b) Align with expected changes in underlying costs over time where these can be projected forward with some degree of confidence;
 - (c) Correspond to a tilt in an annuity calculation applied to convert a capital cost into an annual equivalent; and
 - (d) Match with spreading a fixed cost over an increasing number of minutes when minutes are expected to increase over time.
- 50 An immediate reduction in MTRs will likely amplify the "waterbed" effect, making it more expensive for consumers to switch to the new 3G WCDMA network, slowing down uptake and the shutdown of the current 2G/3G CDMA network. This also will not be for the long-term benefit of end users.
- 51 Since the Act provides explicitly that achieving outcomes for the long term benefit of end users is a key part of its purpose and that the Commission is required to make the recommendation that best gives effect to this purpose,⁶ Telecom finds it difficult to understand the Commission's preliminary view set

⁵ MTAS Comments Letter, page 4.

⁶ Telecommunications Act 2001, sections 18(1) and 19(c).

out in the MTAS Comments Letter. The glide paths set out in the Initial Telecom Undertaking are:

- (a) Consistent with international regulatory practice;
- (b) In the long term interest of end users; and
- (c) Reasonable and appropriate in the context of MTAS in New Zealand.

Minute + second pricing

- 52 The Commission has expressed some concern with the current New Zealand industry standard approach of applying minute+second pricing (60 second minimum call duration) in relation to MTRs.⁷ There are significant costs associated with implementing a different pricing structure and, as set out below, there is no clear reason to prefer any particular pricing model. We agree with the Commission that a pragmatic way forward is to adjust the benchmark to take into account the differing charging arrangements in benchmarked jurisdictions.
- 53 In any case, minute+second pricing is a valid pricing methodology where the initial period is an efficient means to capture call establishment costs. This approach has been employed to address a number of issues which may become problematic if a second+second pricing structure is adopted. For example, the following components of an Access Provider's costs might not be recovered under a pure second+second model:
- (a) *Call set-up costs* - Initial switching costs are separate to the capacity costs of carrying calls. These can be recovered with a flag-fall charge, but in the absence of that there needs to be some mechanism to recover them particularly in relation to very short calls.
 - (b) *Unsuccessful calls* - Calls to engaged numbers or ring-no-answer calls are typically not charged for (although they could be). These costs can be recovered from higher charges on successful calls.
 - (c) *Short duration calls* – Those shorter than 2.0 seconds are not charged for under the current interconnection model. This concession needs to be compensated for by some means.
 - (d) *Ring time* - The average ring time on successful calls is around 15 seconds. The network is being utilised during this time but the time is not being charged for. This overhead on each call is particularly significant in relation to shorter duration calls.
- 54 All of these costs could be recovered in a second+second charging model by simply increasing the price, but that would not necessarily drive more efficient outcomes than using a minute+second charging model.
- 55 The current model aligns with the structure of retail prices so that retailers of both FTM and MTM calls do not need to take the risk of call durations being

⁷ MTAS Comments Letter, page 4.

either shorter or longer than expected, creating a mismatch between interconnect charges and their ability to recover costs. Again, though the risk could potentially be put onto the retailers, it is not clear that this is a more efficient outcome given retailers' limited ability to manage that risk.

56 Under the current charging structure, Telecom charges for 1055 seconds for every 1000 seconds of mobile network time used. If successful calls (greater than 2.0 seconds) were charged on a second+second basis and ring time was excluded then Telecom would be charging for 856 seconds for every 1000 seconds of mobile network time used. This shows that the current model is a better reflection of the structure of costs than a pure second+second model.

57 The Commission's concerns are particularly surprising since minute+second pricing was expressly endorsed by the Commission for interconnection termination charging in decision 477. The commission stated at paragraph 85 of that decision:

Call billing in one second increments after the first minute is efficient and consistent with a forward-looking cost-based price as a means of recovering call set-up costs. The fact that the parties already bill retail customers on single second charging increments indicates that a major adjustment to current billing systems will not be required to bill wholesale customers in first minute and then per second increments. Therefore, in circumstances where minimum call duration charges are permissible (i.e. where there is no flag fall charge), the Commission determines that call billing will be in one second increments after the first minute.

58 If there are some concerns in relation to the minute+second pricing method, then they could only relate to the quantum of the price, rather than the structure of it. The structure is a better model for network usage than anything other than an interconnect charge which includes charging for ring time. This would have material implementation issues.

59 Telecom's recommended approach is that, rather than pursuing a change to the interconnection pricing structure in this regard, the Commission (as suggested in the MTAS Comments Letter) make an adjustment to the benchmark prices to allow for those countries which have a different interconnect charging basis to ensure that it is comparing like with like prices.

Handover

60 NZ Communications is correct⁸ that if it chooses not to have a handover point in the LICA Group⁹ where a Telecom fixed line customer originates a call to a NZ Communications mobile number, Telecom will transport that call to wherever NZ Communications does have a point of interconnection (**POI**) and

⁸ NZ Communications, Submission on MTAS Undertakings, para 2.9; see also MTAS Comments Letter page 22.

⁹ A "Local Interconnect Calling Area Group" (as used in standard Telecom interconnection agreements) is a group of geographic areas associated with one or more specific number series used to demarcate boundaries for interconnection charges.

deduct a transport fee of 3.5 cents per minute from the MTR to compensate Telecom for the use of its national transport network. If NZ Communications chooses to pick up that call in the LICA Group where it originates, then there is no transport charge deducted from the MTR paid to NZ Communications.

- 61 It is a question of network economics for a network operator; i.e. does it make more sense to invest in the handover and backhaul infrastructure in a particular LICA Group or does it make more sense to have Telecom transport the call to your chosen POI and pay Telecom for that service. Providing a party with interconnection access to Telecom customers has never meant that Telecom is required to subsidise that party by transporting calls around the country for free.
- 62 The current model for handover of calls from FTM networks has that handover taking place at fixed network POIs. This provides a saving in transport costs from the fixed POI to the mobile switching centre (**MSC**) in relation to any FTM calls originating in LICA Groups without a MSC. Telecom estimates that this saves fixed line operators about 0.47 cents per minute relative to a MSC handover structure. It is not clear that there is an efficiency or end user benefit gain to be made out of a wealth transfer away from companies in the fixed line toll business towards companies in the mobile business.
- 63 It is well recognised (both in New Zealand and internationally) that there is value, and an associated network cost, in transporting calls on a national network, which is quite distinct to the interconnection service. The 3.5 cents per minute charge is entirely consistent with that approach and it is reasonable that Telecom or any other national transport provider seeks compensation for that transport service.
- 64 Telecom adds that, in the context of bilateral agreements, the parties are free to negotiate alternative arrangements if there is mutual benefit in so doing. Furthermore, NZ Communications has a number of alternatives to paying the 3.5 cents per minute transport charge. NZ Communications could:
- (a) Build to the POI in the LICA Group;
 - (b) Purchase links to the LICA Group POI from another party; or
 - (c) Buy a transport service from an operator who has built to the POI.
- 65 Rather than changing the handover model, the better approach would be to factor this out of benchmark comparisons by adding an adjustment of 0.2 cents back to the overseas results. This figure represents the 0.47 cents per minute saving for FTM spread across all mobile-terminating calls including MTM.
- 66 If there was to be a change to the handover arrangements, whereby fixed line operators were required to hand over calls to Telecom mobiles at the MSCs, those operators would face major implementation issues in having to re-route those calls. This is largely due to the relatively few LICA Groups that contain MSCs (only three of the 24), and the consequential routing changes that the

fixed operators would need to make. These implementation costs are over and above the additional transport charges those operators would face.

- 67 If the MTAS service were to be regulated the Commission would need to determine what the appropriate arrangements for both handover and transport should be in relation to (for example) a CallPlus toll bypass customer in Timaru calling a NZ Communications mobile through an MSC in Auckland.

Origination differentiated charging

Internationally originated calls

- 68 The MTR Deed provides for a reduction in the MTR on domestically originated FTM calls. The MTR Deed contains an obligation to pass through those reductions to retail end users because it was recognised that there could and should be a benefit to New Zealand end users from the reduction of the FTM MTR at an interconnect level.

- 69 International termination rates are either posted terms and available to all carriers or the result of bi-lateral negotiation. Generally, Telecom negotiates bi-lateral arrangements with countries for which there are material call volumes. Termination rates to mobile networks in overseas countries vary significantly, [

]TNZRI.

- 70 The MTR Deed contains no obligation to similarly lower the MTR for internationally originated calls to Telecom mobiles (**IO Call**) and the IO Call MTR has remained static since 2007. The beneficiary of any reduction in the IO Call MTR is the offshore telecommunications company who carries the calls and potentially their retail customers who originate them (should those offshore carriers chose to voluntarily pass through the savings at a retail level as opposed to banking them and maintaining their existing retail rates). Further, a unilateral reduction in New Zealand rates would limit Telecom's ability to negotiate lower rates in overseas markets.

- 71 Essentially a reduction in the IO Call MTR results in a wealth transfer from New Zealand based network operators to the offshore originators. There is no discernible benefit to the New Zealand end user. In fact, because of the way in which Telecom negotiates international minute volume swaps - whereby we, for example, might swap 10,000 Telecom Mobile minutes with an international carrier for 50,000 US fixed minutes - a reduction in the IO Call MTR means that we are able to get fewer international termination minutes from these swaps, driving up the average cost of an outbound call from New Zealand, which may in time be passed on to New Zealand end users. As above, any limitation on Telecom's ability to negotiate offshore termination rates would further increase New Zealand costs.

- 72 Telecom is careful not to discriminate in its charging of operators originating international calls to Telecom mobiles. The IO Call MTRs are not differentiated by the country of origin. The IO Call MTRs do, however, vary

with commercial factors such as the volume of traffic supplied or considerations such as the supply of reciprocal services.

- 73 The Commission also refers to the Government statement of economic policy released 5 February 2009.¹⁰ Consideration of Government economic policy in that regard is not relevant to the Commission's consideration of undertakings under Schedule 3A. The Commission must have regard to statements of economic policy only in the exercise of its powers under Schedule 3 (see section 19A of the Act). However, undertakings are dealt with exclusively under Schedule 3A (except where a deferral is recommended – see clause 7 of Schedule 3 – which has not yet occurred).
- 74 Further, the Commission's primary responsibility is to give effect to section 18 of the Act. Under section 19A, the Commission's obligation under a Schedule 3 investigation is simply to "have regard" to such statements of economic policy. A statement of economic policy is not a direction to the Commission. And the Commission is not bound to give effect to any Government policy transmitted to it under section 19A, although it must of course turn its mind to the statement of policy and decide what weight to give to it. Ultimately a statement of economic policy is but one factor among many for the Commission to assess and balance. The Commission must make a recommendation that it considers best gives, or is likely to best give, effect to the section 18 purpose.
- 75 In summary, when exercising its discretion in a Schedule 3 investigation, the Commission must pay due attention to any Government statement of economic policy, but such policy expressed in the statement is not binding on the Commission.

VOIP originated calls

- 76 Telecom notes that it has no objection to VOIP calls per se - or other voice transmission technologies - as VOIP is simply another technology which allows the transport of voice calls. However, our primary concern with VOIP-originated calls is that often the true location of the originating party is disguised, which in turn facilitates arbitrage.
- 77 Further, the quality of international VOIP can depend on the codec used at either end of the route, and the impact of trans-coding (multiple codecs) that may have been required in intermediate networks. The interconnect of international (i.e. high latency) VOIP traffic raises a number of commercial and technical issues, particularly relating to the end-to-end management of call quality. These issues are being considered by service provider organisations such as the I3 Forum and IPIA (GSM Association) and care should be taken not to pre-empt that work through setting New Zealand-specific arrangements for VOIP traffic.
- 78 The integrity of many commercial interconnection arrangements in New Zealand is intricately linked to both numbering and the location of the calling

¹⁰ See MTAS Comments Letter, page 18

party. For instance, in fixed-PSTN termination, intra-LICA calls are subject to Bill and Keep, while a very similar call type - inter-LICA calls – are charged a termination fee for well-understood historical reasons. Similar principles therefore apply to FTM calls, whereby VOIP originated or IO Calls are presented as domestically-originated calls to avoid the higher termination charge for that call type. Telecom is therefore justified in applying a different charge for VOIP originated and IO Calls and also in requesting arrangements that recognise the true location of the originating party.

Commission’s comments on retail pricing

- 79 Telecom acknowledges the Commission’s comment in the MTAS Comments Letter that its “primary concern is the promotion of competition at the wholesale level” and that “the Commission would expect increased [wholesale] competition to benefit end-users by leading to lower retail prices.”¹¹ Telecom agrees and reiterates its submission¹² that the Commission’s role is not to regulate retail prices, including pass-through and on-net/off-net calling. Should the Commission consider that a pass-through obligation would be of sufficient benefit to end users, it can achieve this by accepting the continuation of the Telecom and Vodafone MTR Deeds. These represent an alternative to regulation under the Act and therefore are able to contain provisions which would not be appropriate in a regulated outcome such as an undertaking to the Commission, or by adding a designated service to the Act.

COMMISSION’S COMMENTS: NON-PRICE TERMS

Overview of changes to non-price terms

- 80 Telecom has carefully reviewed the comments on non-price terms provided in the MTAS Comments Letter and the proposed non-price terms submitted by Vodafone and NZ Communications. As a result, we have made a number of changes to the non-price terms from our Initial Telecom Undertaking to ensure that they better accord with those submitted by Vodafone.
- 81 We have attached as Appendix 1 to this submission a table recording the key differences between the non-price terms of the Vodafone and Telecom undertakings and stating why we prefer the Telecom approach or noting where we have made changes to reflect Vodafone’s position. We have also included with this submission a mark-up of the Initial Telecom Undertaking showing the changes made in this regard. In particular we have:
- (a) Widened the definition of “Third Party Reseller” to cover third parties who resell certain services using NXX numbers on either carrier’s network. Previously this definition covered O2X numbers only. There are consequential amendments to the definition of “Local Number”;

¹¹ MTAS Comments Letter, pages 16-17.

¹² Telecom Submission on the Schedule 3A Undertakings Received by the Commission, paragraph 45.

- (b) Expanded the definition of "Mobile Call" to include calls from Local Numbers on a mobile network; and
- (c) Amended clause 2.2 to allow the Access Seeker's parent company's credit rating to be taken into account when reviewing the prerequisites to providing service.
- (d) Removed from clause 2.1 of Appendix A (relating to Text Messages) the "equal priority and urgency" of delivery provision as this was not a feature of Vodafone's Test Message undertaking;
- (e) Deleted the "Restrictions on Promotions" provision which was formerly clause 5.3 of Appendix A - this is now covered by the various references to the Unsolicited Electronic Messages Act 2007;
- (f) Inserted in clause 8.2 of Appendix A a prohibition on conversion of MMS to SMS consistent with the Vodafone undertakings;
- (g) Inserted into various clauses references to the Unsolicited Electronic Messages Act 2007;
- (h) Inserted into clauses 14.1 and 14.2 and 14.3 of Appendix A a new right of suspension if either carrier uses service in a way that has a material detrimental impact on the other's customers or network; and
- (i) Removed from clause 15.4 of Appendix A some of the signalling links forecasting provisions.

82 We discuss below the issues relating to non-price terms on which the Commission has sought comment.

Compatibility of undertakings

83 The MTAS Comments Letter invites Access Providers to address issues of potential incompatibility with each others undertakings.¹³

NZ Communications undertaking

84 Telecom considers that the approach taken by NZ Communications in its undertaking is sufficiently ambiguous as to render it almost impossible determine compatibility with either of Vodafone's or Telecom's undertakings. In particular NZ Communications' view on price terms is quite incompatible with the positions put forward by Vodafone and Telecom.

Vodafone undertakings

85 Notwithstanding the fact that Vodafone has submitted three separate undertakings, we believe that the fundamental commercial terms are quite compatible with our undertaking.

86 Overall, there is a significant level of alignment between the Vodafone's and Telecom's non price terms and we believe that the Commission can consider the undertakings are one (save the differences set out above and pricing).

¹³ MTAS Comments Letter, p20

Moreover, we believe further alignment is possible and we support Vodafone's suggestion of a Commission workshop focused on reconciling undertakings.

87 The material differences are:

- (a) The lack of reciprocity in the Vodafone terms which the Commission has asked Vodafone to address;
- (b) The different handover structures with Vodafone's three handover points reflecting its mobile network, whereas our 24 handover points for calls that have a fixed element reflects our national coverage fixed network;
- (c) Vodafone's inclusion of a retail pass through for F2M traffic which is a feature of the existing MTR Deed but not of our Undertaking.

Reciprocity of interconnection setup costs

88 The MTAS Comments Letter asks Telecom to provide reasons for establishment fees and other associated charges not being reciprocal in its undertaking.¹⁴

89 Telecom has a significant fixed and mobile customer base that new network operators will wish to access. We provide this access to all network operators who meet the necessary credit and technical criteria. Telecom incurs one-off costs for building all the services and interfaces necessary to establish interconnection with a new network operator. We reasonably seek to recover these costs from the operator requesting access to our customer base.

90 In Telecom's experience our costs tend to be far greater than those of the Access Seeker in this situation, largely due to the extent of our network and the work involved. Specifically, there is nothing that Telecom specifically requires another network operator to establish, so it is highly unlikely that the charges would apply in reverse. Our charges are set to recover the costs of establishing interconnection, rather than to make a profit from the exercise. These comments apply equally to the costs of establishing interconnect links and for carrying our additional work which is not explicitly covered in the schedule accompanying the undertaking. Telecom notes that these charges are of course negotiable on a case by case basis depending on the benefits to both parties.

Standard Access Principles

91 The Commission has invited comments on how the undertakings submitted comply with the standard access principles and the limits on those principles set out in the Act. The Commission notes that "reference to the standard access principles and the limits on the standard access principles under the Act in an undertaking is not sufficient"¹⁵ to meet the requirement that the undertaking comply with those principles. Telecom agrees with this statement insofar as where the substance of an undertaking was inconsistent

¹⁴ MTAS Comments Letter, p21

¹⁵ MTAS Comments Letter, p19

the access principles, a perfunctory reference to those principles would not remedy the non-compliance.

- 92 However, the Initial Telecom Undertaking and the Amended Undertaking do in substance comply with the standard access principles and the limits on those principles provided in the Act, so far as they are applicable in the context of MTAS (e.g. standard access principle 3 is difficult to apply in the context of MTAS as a carrier cannot, by definition, supply interconnection services to itself). If the Commission has a different view on this point, we would be grateful if it would provide details of why it believes Telecom's undertaking does not comply with the standard access principles.

APPENDIX 1: KEY DIFFERENCES BETWEEN NON-PRICE TERMS OF THE INITIAL TELECOM UNDERTAKING AND THE VODAFONE UNDERTAKINGS

Key:

TU = Telecom Undertaking dated 12 January 2009

VUs = Vodafone Undertakings submitted 12 January 2009

Difference	Comments
High level points	
<p>Unlike the TU, the VUs:</p> <ul style="list-style-type: none"> • Do not set out the precise terms on which the Access Seeker's reciprocal service must be provided; • Are siloed (i.e. there is one VU for each of FTM Calls, MTM Calls and Text Messages). There are no cross-default provisions as between the siloed Undertakings; • Include a pass-through provision for reductions of the price of FTM Call Termination Service; 	<p>Telecom submits that (for certainty and clarity) the preferable approach is to set out the precise terms that will apply to the provision of reciprocal services by the Access Seeker. This is the approach taken in the TU.</p> <p>Lack of cross-default provisions gives rise to the possibility of gaming (for example, by an Access Seeker (or Vodafone) limiting consequences by failing to pay under one Undertaking (or one set of reciprocal terms) while the others continue).</p>

Difference	Comments
<ul style="list-style-type: none"> Provide that (unless otherwise agreed) handover points are limited to three Major LICAs - Auckland, Wellington and Christchurch (compare 24 Major LICAs under the TU). 	<p>Under the VUs, an Access Seeker (e.g. Telecom) with many existing handover points will be saddled with rerouting and hauling calls long distance to handover points at only Auckland, Wellington and Christchurch.</p>
Term	
<p><i>Commencement</i></p> <p>Under the TU, the commencement of the Term is the later of the date of registration of the TU, and the date upon which the Access Seeker executes the Deed of Acceptance. Under the VUs the commencement is the same except that for FTM the "Service Commencement Date" can be no earlier than 1/4/12.</p> <p><i>Expiry</i></p> <p>Under the TU, expiry of the Term occurs when the registration of the TU expires. Under the VUs, expiry is five years from the date of registration of the VUs (or earlier date in the event Vodafone becomes an Access Provider for the respective services (as designated access services under the Telecommunications Act 2001)).</p>	<p>The VU provisions delay availability to Access Seekers of services under the VU for FTM until 1/4/12.</p> <p>Expiry of registration is governed by clause 3 of Schedule 3A, Telecommunications Act 2001. The TU's expiry provisions comply with the 2001 Act. The VUs' expiry provisions do not.</p> <p>In particular we note the Commission's preliminary view that the appropriate length of time that regulation or an undertaking should set prices needs to reflect a balance between providing certainty and recognising that mobile telephone markets are subject to rapid technological change. In the Commission's MTAS Comments Letter its</p>

Difference	Comments
	initial view is that a period of less than five years is appropriate and is likely to be around three years. ¹⁶
Prerequisites to provision of Services	
<p>Under the VUs, prerequisites to the provision of Services include:</p> <ul style="list-style-type: none"> • Agreeing number portability specifications (not a prerequisite under the TU); • The Access Seeker having an appropriate credit rating or providing security. Unlike the TU, this second prerequisite does not allow the Access Seeker to rely on its parent's credit rating (e.g. in Telecom's case, TCNZ's) for these purposes. 	<p>The requirement under the VUs to pre-agree the number of portability specifications:</p> <ul style="list-style-type: none"> • May delay provision of Services (note the detailed process under clause 2.4, Schedule 3 of the VUs in the event of failure to agree); and • Seems unnecessary, particularly where there are existing agreements in place for the specifications which are operating satisfactorily. <p>Telecom believes that these provisions should allow an Access Seeker to rely on its parent's credit rating for these purposes. Telecom has amended its TU to allow the Access Seeker's parent (as well as TCNZ) to satisfy the requirements if they have an "acceptable credit rating" (as defined in clause 2.2a, Schedule 2 of the TU).</p>

¹⁶ MTAS Comments Letter, see pages 3-4.

Difference	Comments
Call Types	
<p>The TU covers the mobile termination of an end-to-end call that “starts life” (in the same network in which it terminates) as a call prefixed by a “Toll Access Code”, or where “02 Non-Code Access” has been applied. Vodafone does not cover this call type.</p> <p>The TU covers only FTM calls which originate from a “Fixed Network” (cf. the FTM VU, which includes no requirement regarding a fixed network).</p> <p>The TU also makes plain that “Toll-free Calls” are not included in the definition of a Mobile Call, whereas the VU does not.</p> <p>The VU “MTM Call” includes calls that originate in the cellular mobile network outside New Zealand on which the Access Seeker End User is roaming.</p> <p>The definition of “transit traffic” in clause 2.1.2 in Subschedule 3D of the VUs seems to cover the circumstance of a call from the Access Seeker to Vodafone via a third party (see also clause 21.6.2,</p>	<p>Mobile terminations of toll bypass calls should be included for clarity.</p> <p>Telecom has amended its TU to abandon the requirement that, where the ultimate source of the “Mobile Call” is a Local Number, that Local Number must be allocated in the other carrier’s Fixed Network. The amendment allows for a Local Number allocated to a telephone or device in the other carrier’s mobile Network to be the ultimate source of a “Mobile Call”.</p> <p>The exclusion of “Toll-free Calls” from the “Mobile Call” definition is required for clarity (i.e. the TU and the VUs relate to MTRs, not call originations).</p> <p>The TU only applies to domestically originated MTM Calls.</p> <p>This type of transit traffic should have no place in the Undertakings, which deal with Calls which are:</p> <ul style="list-style-type: none"> • Handed over directly from the Vodafone Network to the Access

Difference	Comments
<p>Schedule 3).</p> <p>Also clause 2.2.2 of the same Subschedule appears to cover calls from the third party via Telecom to Vodafone.</p> <p>Clause 2.2.2 also purports to cover Calls traversing calling card and other platforms. The TU excludes all forms of transit Calls or Calls that traverse third party platforms.</p>	<p>Seeker Network (and vice versa); and</p> <ul style="list-style-type: none"> Between the respective end-users of access provider networks and Access Seeker Networks (i.e. not end-users of third party networks). <p>Third parties can become Access Seekers themselves; or they can separately purchase transit or transport services.</p>
<p>Third Party Resellers</p>	
<p>Unlike the VUs, the TU does not cover third party resellers of Local Numbers on either the Access Seeker's Network or Telecom's Network.</p>	<p>Telecom has amended its TU to cover third party resellers of Local Numbers on either the Access Seeker's Network or Telecom's Network.</p>
<p>Charging Principles and Payment of Charges</p>	
<p>Under the VUs, "Duration" of Calls is defined. Under the TU, it is not defined.</p>	<p>But in practice, the measurement of duration under the VUs is no different from how Telecom would measure duration under its TU.</p>

Difference	Comments
<p>Under the VUs, disputes can be raised regarding invoices up to 12 months after the Due Date (cf 180 days under the TU).</p> <p>Under the VUs, "backbilling" is allowed 12 months from the date of provision of the Service (cf 180 days under the TU).</p>	<p>Telecom submits that in both cases the 180 day period is sufficient, and reflects good practice and efficiency of billing the services the subject of the TU.</p>
Handover and Links	
<p>Under the VUs, Vodafone only has to obtain consents as it "is reasonably able to procure" from other people to let the Access Seeker have access to the Access Seeker Handover Point on Vodafone premises. Under the TU, obtaining the consents is an unqualified requirement.</p>	<p>The party providing premises must be able to provide suitable premises (with all necessary consents) to enable the other party to house and have access to its Handover Points.</p>

Difference	Comments
Number portability	
<p>Different terminology is used in the TU and the VUs to denote the porting of numbers. In the TU, the definition of “allocated” in clause 1.2(a), Schedule 2, is key to the interpretation of provisions dealing with ported numbers.</p> <p>Under Schedule 4 of the VUs, the Access Seeker takes the roles of “Donor Carrier” and (in the case of FTM and MTM) “Contracted Service Deliverer” in porting.</p> <p>Unlike the TU, the VUs do not include a clear charging basis where the number portability database fails (see clause 21.12, Schedule 3).</p>	<p>When the ported provisions in the TU are read together with the definition of “allocated”, there is very little difference between the TU and the VUs.</p> <p>In the TU, these roles are not appropriate, because the TU does not cover any form of transit.</p> <p>Telecom submits that it is preferable to have a clear charging basis set out to cover the situation where number portability database failure occurs.</p>
Dispute Resolution	
<p>Under the VUs, the CEDR model mediation procedure applies (compare the LEADR New Zealand Inc procedures under the TU).</p> <p>Arbitration under the VUs is pursuant to the Rules of Arbitration of the International Chamber of Commerce (compare the Arbitration Act provisions which apply under the TU).</p>	<p>Telecom’s preference is to use the New Zealand based procedures for mediation and for arbitration referred to in the TU, which are familiar to New Zealand based Access Seekers.</p>

Difference	Comments
<p>Following suspension or early termination of a Service, the Access Seeker under the TU cannot duplicate its rights to that Service by entering into a subsequent Deed of Acceptance. Under the VUs, there is a restriction on entering a new undertaking for at least six months and until all breaches of Fundamental Obligations and material obligations (which are capable of remedy) have been remedied by the Access Seeker (clause 6.2, Schedule 3, VUs).</p> <p><i>Force Majeure</i></p> <p>The time periods after which Telecom (or the Access Seeker) can terminate the TU following the force majeure are shorter under the TU (as compared with the VUs).</p>	<p>Telecom’s preference is that once suspension or termination of Services has occurred, the Access Seeker cannot replicate those Services by simply entering into a new Deed of Acceptance.</p>
Liability	
<p>A key head of liability under the TU is for “Direct Loss” suffered arising from a “Refusal to Make Services Available” (compare liability for “Direct Loss” suffered as a result of wilful misconduct or gross negligence under the VUs).</p> <p>The VUs do not include a detailed definition of “Direct Loss” (a detailed definition is included under the TU).</p>	<p>The structure of the liability provisions is broadly similar between the TU and the VUs, although there are some differences in approach as noted. The actual difference in the liability caps is difficult to quantify, because the VUs are siloed, and much would depend on the volume of traffic under each VU.</p>

Difference	Comments
<p>The TU includes an indemnity in favour of the other carrier for loss arising from claims by the other carrier's Customers. There is no corresponding indemnity in the VUs.</p> <p>The caps under the TU and the VUs are different. But note that in making the comparison, account has to be taken of the fact that the VUs are separate. Therefore, each cap on liability only relates to a single service provided under the respective VU.</p>	
Confidential Information	
<p>Unlike the VUs, the TU does not include provisions covering "Specified Confidential Information" (i.e. specific information agreed to be subject to these particular provisions).</p>	<p>Telecom has found that in practice these "Specified Confidential Information" provisions are not required.</p>
Technical	
<p>The VUs contain specific provisions requiring that neither a carrier nor its Group connect any equipment (including any SIM box) to the other carrier's Network without the other carrier's prior written consent, which consent must specifically reference clause 13.2, Subschedule 3A.</p>	<p>This provision would potentially require the first carrier to obtain the other carrier's specific consent every time a new piece of equipment is proposed to be connected to the first carrier's network. This creates a new overlay which is impractical and unwieldy. Telecom agrees with addressing in some way the use of SIM boxes in relation to the interconnect arrangement – but not in a way that introduces broad obligations that have implications well beyond the SIM box issues as they affect the Undertakings.</p>

Difference	Comments
SMS	
<p>Unlike the TU, the Text Message VU covers texts from subscribers of the Access Seeker roaming in a network of another network operator.</p> <p>The Text Message VU covers transit in limited circumstances.</p> <p>Unlike the Text Message VU, the TU contains provisions in the Text Message Service description requiring delivery of Text Messages to be with equal priority and urgency (see clause 2.1bi and ii, Appendix A of the TU).</p> <p>Under the Text Message VU, there is no review to take into account imbalance of text traffic; types of web-to-text or similar systems operated; or other agreed matters. There is provision for such reviews under the TU.</p> <p>There is no price adjustment under the Text Message VU where the “success rate” (i.e. the percentage of Text Messages delivered successfully) is less than 99%. There is provision for such adjustment (together with an audit) under the TU.</p>	<p>The provisions for SMS are already fairly closely aligned. Except for the specific comments below, Telecom has amended its TU to align with the approach in the VUs.</p> <p>The TU does not include transit of Text Messages.</p> <p>Telecom wishes to retain such provisions for review, which are appropriate after the first three months of a new relationship with an Access Seeker.</p> <p>Text message charging is on handover (not answer). The “success rate” provisions are appropriate to allow for adjustment where handover is no longer sufficiently correlated with successful delivery.</p>

Difference	Comments
<p>Under the Text Message VU, there is a prohibition on the conversion of SMS to MMS. There is no corresponding prohibition in the TU.</p> <p>Under the Text Message VU, Vodafone has broader (and different) grounds for suspension/early termination. For example, Vodafone may suspend where it considers that the Access Seeker is using the service in a way that has a material detrimental impact on the Vodafone Network.</p> <p>Unlike the TU, the Text Message VU contains no regime for agreement on capacity requirements for Signalling Links.</p> <p>The Text Message VU ties obligations regarding use of web-to-text to the Unsolicited Electronic Messages Act 2007.</p>	
A-numbers	
<p>Unlike the TU, the VUs (at clause 3.1.3, Subschedule 3D) appear to be stating that Vodafone would (under reciprocal terms) be free at whim to allocate either a local or mobile number to a local service customer calling from the Vodafone Network.</p>	<p>As a matter of principle, Telecom prefers an approach where the true A-number is passed forward. Such principle is consistent with ensuring there is no arbitrage resulting from A-number manipulation.</p>