



Telecom New Zealand Limited

Cross - submission in respect of the

**Commerce Commission's Draft Report for its
Schedule 3 Investigation into Regulation of
Mobile Termination**

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Public Version

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**Annex A: Charles River Associates, Mobile Termination Regulation CBAs –
A Review and Reconciliation**

**Annex B: Professor Hausman, Response to Professor Cave and Professor
Valletti**

A EXECUTIVE SUMMARY

- 1 This cross submission supplements Telecom's submissions on the Commission's Issues Paper and the Commission's Draft Report, and Telecom's three submissions should be read together.
- 2 The issues raised by the Commission range over the fixed and mobile markets. A striking feature of the submissions received by the Commission, when read together, is the degree of alignment between participants in a market when discussing issues in that market.
- 3 Participants in the fixed line toll calling market have made consistent submissions on the proper definition of the market, and the low barriers to entry and expansion in that market. Telecom and Vodafone are similarly consistent on the proper definition of the mobile services market and the high degree of competition in that market.
- 4 This consistent market feedback presents a significant challenge to the Commission's draft analysis, which is inconsistent with the market data and experience recorded in submissions. Telecom discussed in its submission the onus on the Commission to demonstrate that any proposed regulatory intervention will best give effect to the section 18 purpose. In a number of significant respects, the Commission's draft analysis is directly contrary to the consensus view of market participants.
- 5 The alignment between market participants is also a useful test for some of the claims made by those not competing and investing in the market. In particular TelstraClear has made claims regarding the mobile services market, and Vodafone has made claims regarding the fixed line toll calling market, that are contradicted by the views of market participants.
- 6 The submissions from Vodafone and TelstraClear demonstrate, in different ways, why the proposed regulatory intervention is a bad idea. Vodafone explains how regulation would cut across the mobile services market in which Telecom and Vodafone are competing hard and delivering significant value for customers. The regulation is very poorly timed, and will cause significant harm to NZ consumers. Both companies are making the transition to 3G; all prices are trending in the direction desired by the Commission and, just as importantly, the continuous investment by, and competition between, Telecom and Vodafone means customer welfare keeps increasing. Telecom agrees with Vodafone's view of the mobile market, and Telecom and Vodafone are aligned on the likely effect of regulation on mobile prices and investment decision-making.
- 7 The TelstraClear submission illustrates the opportunism that the possibility of regulation encourages. TelstraClear suggests the Commission extend

regulation to 3G, despite the powerful chilling effect this would have on investment and development in the mobile market. TelstraClear argues the Commission should ignore the indirect costs of regulation, when the Commission has in other regulatory proceedings identified indirect costs as by far the most significant cost of regulation. The cost benefit study submitted by TelstraClear accumulates a series of unrealistic and aggressive assumptions to produce an unwieldy total that seems directed at a negotiation exercise, rather than an expert and objective assessment of the potential impact of regulation.

- 8 The Commission now has before it several cost-benefit studies. Charles River Associates has prepared a report reconciling the studies, and identifying the key differences (attached as Annex A).
- 9 Crucially, the only study that can properly be called a cost-benefit analysis of mobile termination regulation is that of Professor Hausman. All other studies are simply adaptations of the Commission's model, which fails to account for the rational reaction of mobile operators to mobile termination regulation, which is to increase other mobile prices (the waterbed effect). Professor Hausman demonstrates that the costs of mobile termination regulation would significantly outweigh the benefits, leaving consumers significantly worse off.
- 10 In terms of the other studies, the Covec analysis reaches similar conclusions to those of Charles River Associates. Marsden Jacob Associates (MJA) reach quite different conclusions, and argue that the benefits of regulation are significantly larger than those calculated by the Commission. However, the attached report by Charles River Associates demonstrates that the adaptations made by MJA to the Commission's model are inappropriate, and at times quite selective.

B LEGAL FRAMEWORK

- 11 In Part B of Telecom's principal submission, Telecom submitted that:
- 11.1 the Commission must demonstrate that any proposed regulatory intervention in telecommunications markets is warranted, and will "best give, or be likely to best give" effect to the section 18 purpose;
 - 11.2 this burden on the Commission is at its highest when the decision being considered is *whether* to recommend a new regulatory intervention (not *how* to regulate when intervention has already been decided); and
 - 11.3 that in making its decision whether to regulate, the Commission is wrong, as a matter of law, to address distributive issues, and as a result must not, in its cost-benefit analysis, count a transfer of producer surplus (through regulation) as a benefit to end users.
- 12 TelstraClear has submitted that:
- 12.1 the burden of proof on the Commission is low – according to TelstraClear, a "less than an even chance" of net benefit from regulation is sufficient; and
 - 12.2 the Commission is right to take wealth transfers into account, even though the law plainly says otherwise.
- 13 In response to TelstraClear's submission, Telecom reiterates its principal submissions, and makes the following additional comments.
- Commission bears the onus and burden of proof**
- 14 In Appendix A of its submission (paragraph 153 – 161), TelstraClear asserts that, due to the meaning of the word "likely", the test "best gives, or would be likely to best give" should be interpreted to mean "it could well happen" or that it "is even less than an even chance, less than probable, but is more than a possibility" that it will happen.
- 15 Telecom submits that the test under the Telecommunications Act for new regulatory intervention – particularly in a market as new and dynamic as mobile services – cannot ever be as low as "less than an even chance" of giving effect to the section 18 purpose statement. Such a test undermines any effort towards principled regulatory decision-making.
- 16 Such a test is also inconsistent with the plain words of the Telecommunications Act.

- 17 TelstraClear has focussed on one aspect only of the test for intervention: whether regulatory intervention is “likely” to give effect to section 18.
- 18 In Telecom’s view, the focus on “likely” ignores half the test. Before it may recommend regulatory intervention, the Commission must determine that such intervention will “*best* give, or be likely to *best* give” – not just be “likely” to give. The requirement that regulation “best” give effect to the section 18 purpose dictates a high standard of proof, even when combined with “likely”.
- 19 On its ordinary dictionary definition, best means “to the greatest degree”, “excelling all others in quality”, or “most appropriate, advantageous or desirable”. This is a far cry from “it could well happen” or “is even less than an even chance, less than probable, but is more than a possibility”, as the test contended for by TelstraClear.
- 20 In making a decision whether to regulate, the Commission must, of course, act rationally and make a principled regulatory decision in accordance with the full statutory test.
- 21 Telecom reiterates also that the burden of proof falls squarely on the Commission’s shoulders when new regulatory intervention is under consideration. That is, the Commission must make the case to warrant new regulatory intervention: the burden does not lie with Telecom and other parties who disagree with intervention to *disprove* that regulation is necessary.

Application of the onus of proof in relation to regulation of mobile termination rates

- 22 TelstraClear suggests (at paragraphs 162 and 163 of its Appendix A) that the Commission has applied “excessively conservative assumptions” in its cost-benefit analysis of whether to regulate mobile termination rates. Telecom disagrees.
- 23 In fact, many of the Commission’s CBA assumptions are quite inappropriately non-conservative. For example, the Commission:
- 23.1 Ignores the welfare costs arising from the “waterbed effect”.
- 23.2 Uses 16 cents per minute for the factual mobile termination rate. This is based on international benchmarking that makes no attempt to control for cost differences between countries, despite the fact that New Zealand is likely to be a relatively high cost country.
- 23.3 Uses -0.6 for the FTM demand elasticity, which the empirical evidence suggests this is “too high” in an absolute sense.

- 23.4 Assumes under Factual 1 that FTM prices will fall to cost by 2010.
- 23.5 Assumes pass-through rates under Factual 2 that exceed 100 percent and historical experience.
- 23.6 Assumes that the counterfactual termination rate drops by only 1 cent per year.
- 23.7 Assumes that indirect costs would be some fraction of estimated benefits.
- 23.8 Assumes that indirect costs would be lower for the net public benefits scenario than for the net consumer benefits scenario.

Commission's approach to wealth transfers is wrong

- 24 In Appendix B of its submission, TelstraClear argues at length that wealth transfers should be counted when assessing whether regulatory intervention should occur. Telecom disagrees with the Commission's approach to wealth transfers, for the reasons discussed in our principal submission. Telecom's view is that, in line with current case law (including the recent High Court decision in *Air NZ/Qantas*, as discussed in Telecom's principal submission at paragraphs 58-63), and with affirmation from the Treasury and the Ministry of Economic Development, wealth transfers from producer to consumer are mutually offsetting, thus welfare neutral, and thus must not be counted by the Commission.

Air NZ/Qantas decision

- 25 TelstraClear, at paragraphs 188-191 of its Appendix B, argues for distinction between benefit to the "public" and benefit to "end-users", in an attempt to distance the Commission's current task from the High Court's analysis of the correct approach to wealth transfers in the *Air NZ/Qantas* decision. TelstraClear asserts that the Commission is not prevented by recent case law from counting wealth transfers, if that is what it wants to do.
- 26 TelstraClear's selective quotation of the *Air NZ/Qantas* decision, and adoption of its own paraphrasing rather than the actual words of the judgment,¹ misleads the reader into thinking the High Court did not exclude the counting of wealth transfers where the focus is on consumers or end-users, rather than the public.

¹ For example, it is the Commission's submission to the Court, not the Court's decision, that "the term 'public' is intentionally broader than 'consumers'; and an efficiency gain that benefits producers is still a benefit to the public."

- 27 To the contrary, this is precisely what the High Court did do. The Court has excluded the counting of wealth transfers under the Commerce Act, which is an Act explicitly focused on the promotion of “competition in markets for the long-term benefit of consumers within New Zealand” (section 1A of the Commerce Act).
- 28 In the *Air NZ/Qantas* decision, the High Court held that:
- 28.1 the long term interests of consumers are best served by balancing the real resource impacts on the economy (in that case, “balancing any efficiency detriments associated with breaches of the statutory competition standard, against any efficiency gains that may result from the business acquisition or contractual arrangement in question”), and that
- 28.2 the “inclusion of *ad hoc* wealth transfers, which are not losses to society, would distort the efficiency assessment by assuming additional economic harm to the public of New Zealand”, and
- 28.3 an explicit new statutory focus on the long term benefit to consumers should not disturb the Commission’s established practice of treating as neutral any wealth transfers between New Zealand consumers and producers.
- 29 The High Court’s decision, after considering the submissions of the parties and the Commission, was:
- It is the balancing of these real resource impacts on the economy that best serves the long-term interests of consumers.* (paragraph 241)
- 30 In the context of the Telecommunications Act, with its similarly explicit statutory focus on the long term benefits to end users, the *Air NZ/Qantas* decision dictates that the Commission should not depart from its established approach of treating as neutral any wealth transfers between New Zealand consumers and producers.
- TelstraClear’s analogy with Part IV of the Commerce Act is flawed***
- 31 At paragraphs 176 to 182 of its Appendix B, TelstraClear seeks to use Part IV of the Commerce Act, and section 52 in particular, in support of counting wealth transfers. In Telecom’s view, section 52, which is concerned with price control, does not provide support for TelstraClear’s or the Commission’s position on wealth transfers in relation to a decision whether to regulate mobile terminate rates. Section 52 sets a price control test for the Commission based on the interests of acquirers or suppliers (as the case may be).

32 This is clearly in contrast to section 18 of the Telecommunications Act, which expressly focuses on the *long term* benefits to end-users. The section 18 focus on *long term* interests puts the Commission's focus squarely on dynamic efficiency considerations when considering whether to regulate in a Telecommunications Act context.

33 For this reason, in Telecom's view, Part IV of the Commerce Act in fact lends support to its view *against* the counting of wealth transfers when making regulatory intervention decisions under the Telecommunications Act.

TelstraClear's analogy with Part IVA of the Commerce Act is also flawed

34 At paragraphs 183 to 185 of its Appendix B, TelstraClear seeks to rely on Part IVA of the Commerce Act, and in particular section 57E, to say that wealth transfers are a relevant consideration for the Commission in its current decision on whether to regulate mobile termination rates. Section 57E relates to declarations of control over electricity lines companies.

35 The comparison with section 57E in fact undermines the argument for counting wealth transfers.

36 The express wording of section 57E of the Commerce Act and section 18 of the Telecommunications Act is plainly different. As a matter of statutory interpretation, this difference must be assumed to be deliberate. The elements listed in section 57E were inserted well after the general reference to efficiency considerations in section 3A of the Commerce Act (inserted in 1990, and most akin to section 18 of the Telecommunications Act). Parliament must have assumed that sections 1A and 3A of the Commerce Act were insufficient on their own to include the specific elements listed in section 57E. These additional elements are plainly not part of section 18 of the Telecommunications Act.

37 That difference in statutory wording is understandable when placed in the context of the decision the Commission is tasked to make in each instance – section 57E arises in the context of *how* to regulate electricity lines companies, after the decision to regulate has already been made. In contrast, section 18 of the Telecommunications Act, when part of a Schedule 3 investigation, focuses on the preliminary decision – *whether* regulatory intervention is justified in the first place.

Other issues

38 TelstraClear has submitted that the Commission's cost benefit analysis should include issues of foreign ownership. This question was considered most recently by the Commission in its *Gas Control Inquiry Final Report* (29 November 2004). The Commission noted this suggestion raised difficult

issues of principle, consistency and measurement, and determined no adjustment was needed in the context of the gas pipelines industry. Telecom submits the same is true of telecommunications markets. The Commission has not raised this issue in its Draft Report and for this reason Telecom has not responded in detail here. If the Commission wishes to consider this issue further, Telecom requests any opportunity to make a full submission.

Vodafone's suggested pass-through condition

- 39 Vodafone submits at paragraphs 306 to 313 of its submissions that if the Commission does decide to regulate MTRs, the Commission should make regulated access to lower MTR prices dependent on evidence of passthrough by fixed operators. TelstraClear has submitted that the Commission cannot legally impose such a condition (paragraphs 132 to 136 of the TelstraClear submission), and Telecom agrees with TelstraClear on this point.
- 40 In particular, Telecom submits that any such condition regarding the retail prices to be charged by fixed operators would be outside the scope of the Telecommunications Act. Clearly there must be limits on the types of terms and conditions that the Commission can legally impose in determinations regulating relations between carriers. In Telecom's submission, those limits must be set by reference to the purpose of the Telecommunications Act. Section 18 of the Telecommunications Act provides that the Act's purpose is to promote competition by regulating the supply of certain telecommunications services "between service providers". This purpose does not extend to (nor, not surprisingly, does the Telecommunications Act expressly allow for) regulating the terms on which a service provider supplies services to its retail customers.

C MARKET DEFINITION

41 In this Section, Telecom briefly comments on submissions made on issues of market definition. As discussed above, a striking feature of the submissions received by the Commission is the high degree of consensus between those companies competing and investing in a market. Claims of narrow or unusual market definitions have only been made by those (including the Commission) not competing in the relevant market to deliver value to consumers.

Fixed line toll calling market

42 Vodafone argues (at paragraphs 207 and following) for a narrow definition of the fixed line toll calling market. It claims that fixed to mobile calls are in a separate market, based on two arguments that are clearly flawed.

43 The first argument is that the Commission's conclusion of a single national retail market for fixed line toll calling services that includes fixed to mobile calls is logically inconsistent with the Commission's upstream market definition (paragraph 209 of Vodafone's submission).

44 Telecom disagrees. Vodafone, at paragraph 208, argues that mobile termination rates are a barrier to entry to the provision of fixed to mobile calls, thus any control upstream of those termination rates drives a narrow market for fixed to mobile calls. Telecom refers the Commission to paragraph 159 of Telecom's Submission on the Draft Report which directly rebuts this suggestion.

45 At paragraph 209 Vodafone applies the SSNIP test to retail fixed to mobile services and concludes customers have no demand-side alternatives to calling the Telecom network. Telecom refers the Commission to paragraphs 157-160 of Telecom's Submission on the Draft Report, which explains how the ease of supply-side substitution widens the market to include tolls. Telecom has not argued that fixed to mobile calls and toll calls are demand-side substitutes, although there is a case for considering this. All it takes is enough customers *at the margin* to substitute mobile to mobile calling for fixed to mobile calling for a "SSNIP" to be defeated on the demand-side.

46 Vodafone's claim that the Commission's wider retail market definition "prevents it from considering... competitive problems that result from vertical integration" (paragraph 211) is both concerning and incorrect. It is concerning because Vodafone is implying that the Commission should define markets in order to reach a pre-determined regulatory outcome. It is incorrect because a wider market definition does not prevent a conclusion that Telecom possesses market power in that wider market. In fact, this is exactly what the Commission has done in its Draft Report, although Telecom continues to disagree with this conclusion, as per its Submission.

47 Vodafone's second argument is that the inclusion of tolls is "inconsistent". At paragraph 214 Vodafone argues that a lack of demand-side substitutability between fixed to mobile and toll calls prevents the products from being in the same market (see paragraphs 213 to 214). Telecom reiterates supply-side substitutability is the definitive argument for a wider market.

Mobile services market

48 Submissions by Vodafone and TelstraClear largely support the alternative (two-sided) wider market definition of the mobile market proposed by Telecom in its Submission. Telecom highlights to the Commission that TelstraClears' experts (Professors Cave and Valletti) also recognise the power of the two-sided market definition when considering mobile competition (paragraphs 9 to 11 of the Cave & Valletti paper).

49 However, Professors Cave and Valletti claim that mobile termination rates are currently set at sub-optimal levels and it would be optimal to set them at 'cost'.

50 Telecom refers the Commission to paragraphs 150 – 153 of Telecom's Submission on the Draft Report, which discuss the strong incentives upon Telecom to get the price structure right, given the two-sided nature of the mobile market.

51 In contrast, Professors Cave and Valletti fail to explain why Telecom and Vodafone would have incentives to choose the "wrong" structure of prices (as claimed at paragraph 11 of their paper).

52 Although Professors Cave and Valletti acknowledge the two-sided market framework, they then revert to an apparent narrow market definition for mobile termination by stating that "mobile operators are not constrained when setting mobile termination rates" (paragraph 11). Telecom explains at paragraph 140 of its Submission why it is not possible for mobile operators to set mobile termination rates whilst holding the subscriber side of the market constant.

53 The key market dynamic Telecom faces is that its mobile customers want to receive calls, thus mobile termination rates cannot be too high, but at the same time Telecom has to make retail mobile subscription rates attractive to ensure take-up of its mobile network. This requires a careful balancing act by Telecom and Vodafone in a market characterised by aggressive competition. This is not a market where "regulation is warranted" (paragraph 11 Cave and Valletti).

54 Attached as Annex B is a paper by Professor Hausman, who reviews the (unsubstantiated) claims made by Professors Cave and Valletti. Professor

Hausman's key response is that Professors Cave and Valletti have failed to conduct an explicit welfare analysis to demonstrate that the regulated outcome in their stylised example would be superior to the competitive outcome. In contrast, Professor Hausman conducted an explicit welfare analysis of the New Zealand mobile markets which demonstrated that the current pricing structure is superior to the Commission's proposed regulated TSLRIC pricing structure (see Annex C, Telecom's Submission). Professor Hausman's study is the only study before the Commission that uses real world data, and directly addresses the central assumption made by the Commission.

- 55 Telecom also rejects the claim by Professors Cave and Valletti that fixed-line users are "exploited" (paragraph 11 of the Cave and Valletti report). In contrast, Telecom has outlined (Section D of its Submission) the competitive nature of the fixed line toll calling market in New Zealand and how customers continue to benefit from falling prices, particularly with the release of Telecom's recent "Anytime" plans.

D COMPETITION ASSESSMENT OF THE MARKETS

56 In this Section Telecom responds to submissions on the nature of competition in the markets that would be affected by the proposed regulation.

Fixed line toll calling market

57 In its submission (paragraph 36(b)) TelstraClear refers to Telecom as "... a vertically-integrated operator able to raise rivals' costs through leveraging its dominance in the mobile termination market...". In addition, the submission from Vodafone (section 6 page 42 and following) refers to the issue of "price squeezes" that allegedly result from Telecom using its position as a vertically integrated supplier of retail fixed to mobile services.

58 The retail fixed line toll calling market is competitive, which means that fixed to mobile prices are set by competition. The fact that Telecom is vertically integrated has no impact on the fixed to mobile prices set in a competitive market. In addition, mobile termination rates are set independently of retail fixed to mobile prices. Telecom's mobile termination price is similar to that of Vodafone's. Since Vodafone is not a vertically integrated supplier of fixed to mobile and mobile termination services, this demonstrates that vertical integration does not have any impact on the mobile termination prices set by Telecom and Vodafone.

59 The market evidence is that for most of the market retail prices are a reasonable margin above the termination rate and, as noted by CRA, the Commission's analysis of pass through implies margins will increase over time.

60 In the highly competitive corporate market segment margins between fixed to mobile and mobile termination rates are small. Telecom submits that:

60.1 these margins should not be considered in isolation, because fixed to mobile calling is part of a package or suite of services offered to the corporate market segment. While the sale of the package or suite as a whole provides for a contribution to the common costs of the service provider, there is no particular margin that must be earned on each product in the package or suite;

60.2 The margins between fixed to mobile rates for corporate customers and mobile termination rates will vary over time based on the intensity of competition between service providers. Small margins reflect the current high level of competition.

61 Telecom therefore submits that in accordance with ordinary market dynamics whatever wholesale rate is set, the margin between the wholesale

termination rate and the retail termination rate will be set by the prices that are determined by competition in the retail sector.

- 62 Telecom agrees with Vodafone's submission that regulation of mobile termination rates will not increase the likelihood of entry into the fixed line toll calling market. However, this is because mobile termination rates are not a barrier to entry into the fixed line toll calling market, not for the reasons suggested by Vodafone at paragraphs 219 – 233 of its Submission.
- 63 Telecom refers the Commission to paragraph 159 of Telecom's Submission, which explains that mobile termination charges are not a barrier to entry, even by reference to the Commission's supply-side test². Mobile termination rates are not an investment cost that represent an entry barrier to firms shifting to the production of fixed to mobile calls. Rather, mobile termination rates are simply a variable production cost dependent on the number of fixed to mobile minutes sold.

Mobile services market

- 64 TelstraClear claims that the "waterbed" effect will not occur because "it is unlikely that mobile network operators are sufficiently constrained by competition for retail subscribers to the extent that additional mobile termination margins would be competed away at the retail level" (paragraph 26 of its submission). Telecom explains at paragraphs 242-245 of Telecom's Submission why this claim is incorrect. In sum, a regulated decrease in mobile termination rates is equivalent to increasing the marginal cost of producing retail mobile services. Any market-wide increase in marginal costs of production will lead to an increase in the price of retail mobile services sold in a market, whether or not monopoly or perfect competition is the reference point. This is consistent with the view of both market participants.
- 65 As well as getting the theory wrong, and being inconsistent with the views of those firms competing in the market, TelstraClear have presented only selective pieces of "evidence" to support its view. Telecom refers the Commission to Telecom's Submission (Annex B, section 3) where a Charles River Associates' report details evidence of rising mobile prices in the UK post the regulated reduction in mobile termination charges in July 2003.³ This is supported by a September 2004 report by Enders Analysis (a UK-

² "Close substitute products on the supply-side are those between which suppliers can shift production easily and in the short-run, using largely unchanged production facilities and little or no additional investment (including investment that would be sunk)..." p. 18 *Commerce Commission Mergers and Acquisitions Guidelines*.

³ In relation to the CRA report, note the reference to "second quarter 2003" in the last sentence of paragraph 107 should be a reference to "second quarter 2004".

based consultancy) who observed similar patterns after extensive analysis of the mobile prices offered by UK mobile operators.

- 66 TelstraClear also claim an absence of any interrelationships between mobile termination and other retail mobile services in Australia as ACCC data “fails to reveal any correlation between mobile termination rate reductions and retail mobile price rises” (para 30, TelstraClear submission). However, this “lack of correlation” is explained by the fact that the ACCC retail benchmarking approach (introduced in 2001) requires that retail mobile prices decrease in line with regulated wholesale mobile termination rates.

E THE IMPACT OF REGULATION AND COST BENEFIT ANALYSIS

67 In this Section Telecom comments on submissions addressing the potential impact of mobile termination rate regulation, and what would occur in the relevant markets absent regulation. Telecom also highlights the report by Charles River Associates (attached as Annex A) that reconciles the cost benefit studies currently before the Commission, and highlights the key differences between the studies.

The Factual – market performance following regulation

68 The key disagreement in submissions is the likely impact of regulation on the mobile services market. Both mobile operators have informed the Commission that if termination rates are lowered by regulatory intervention, then the very significant loss in revenue experienced by mobile operators will result in other prices in the mobile services market being higher than those prices New Zealanders would have paid in an unregulated market.

69 Both the Telecom and Vodafone submissions demonstrate that even a small impact on other prices in the mobile services market would outweigh all of the benefits of regulation identified by the Commission. This illustrates how much the Commission's draft analysis depends on the assertion – contrary to the direct evidence of market participants – that regulation will not have *any* affect on other prices in the mobile services market. Furthermore, given the amount of revenue involved, the price rebalancing is likely to be significant rather than small.

70 Vodafone and Telecom noted in their submissions that the legal framework requires the Commission to demonstrate that any regulation will increase competition. However, the Commission has not presented a rationale for why this would occur. The mobile termination rate is a variable cost input into the provision of a fixed to mobile service. While a reduction in variable (marginal) cost is likely to result in a reduction in the fixed to mobile price, this is quite distinct from an increase in competition.

The Counterfactual – the absence of regulation

The Commission's cost-benefit analysis

71 The Commission now has several cost-benefit studies to consider. Charles River Associates has prepared a report reconciling the studies, and identifying the key differences (attached as Annex A).

72 The principal findings of CRA are as follows.

73 First, while all studies respond to the Commission's model, which is limited in scope to the fixed to mobile "market", CRA, Covec and Professor Hausman are of the view that a robust cost-benefit study would quantify

the effect of price rebalancing in the mobile services market. Professor Hausman has quantified this effect, demonstrating that the costs of mobile termination regulation would significantly outweigh the benefits, leaving consumers worse off.

- 74 Second, the MJA analysis, prepared for TelstraClear, is an outlier. This is the result of MJA making a series of extreme assumptions, including:
- 74.1 the calculation of a “terminal value” for net benefits post 2010. CRA and the Commission considered the identification of costs and benefits in mobile markets this far out to be uncertain (consistent with the Commission’s approach in the LLU inquiry). Further, there is no reason to assume the benefits of regulation would extend beyond the 5-year regulatory period.
 - 74.2 Unregulated mobile termination rates would, in the future, stop trending down as they have in the past. MJA use this assumption to create a greater divergence between regulated and unregulated scenarios. To support this sudden flattening out of unregulated termination rates, MJA refers to European data. MJA’s interpretation of this data is corrected by CRA, who note the unregulated average termination rate in the European study declined by 11.9% between 2001 and 2003, while CRA assumes only a decline of 4.7% in the counterfactual. MJA also speculates that regulatory pressure has driven mobile termination rates in the past, and asserts this will not continue in the future. This speculation as to the explanation for past changes in the mobile termination rate, and the likely future trends, is not supported by Telecom, Vodafone, or the available market evidence. CRA is of the view the counterfactual mobile termination rate is best calculated using the logarithmic trend line to extrapolate available market data.
 - 74.3 Despite recommending a range of -0.2 to -0.8 for the fixed to mobile price elasticity of demand, and supplying additional information on the estimate for France of -0.491 and Australia of -0.3 to -0.5 , MJA nevertheless supports the -0.6 figure used in the Draft Report. CRA notes the only point estimates above -0.5 are the internal calculation from Telecom, picked up by the terms of the Commission’s s98 notice but not supported by Telecom, and market analysts’ estimates. Given available information, CRA is of the view the most appropriate figure to use is -0.4 .
 - 74.4 Using the median from a benchmarking study conducted by Network Strategies as an estimate of the cost of mobile termination, instead of the 75th percentile from the Commission’s range. This is

arbitrary, and CRA note it is appropriate to use the 75th percentile to reflect, to some degree, the asymmetric costs of regulatory error.

75 Third, Covec makes a number of criticisms of the Commission's model also made by CRA including:

75.1 Factual 1 is an inappropriate factual. Covec states that, "It is our opinion that Factual 1 should be discarded entirely ..." (page 17);

75.2 The Commission's Factual 2 pass-through methodology is "biased towards generating positive net-benefit numbers" (page 18);

75.3 The Commission is overly "optimistic" in its assumptions about pass-through rates, and mobile termination rate regulation is unlikely to increase competition;⁴

75.4 The Commission's approach to modelling indirect costs is inappropriate, and the Commission makes an error in its calculation; and

75.5 The counterfactual mobile termination rate time series should be developed by fitting a logarithmic trend to the historical data.

⁴ Although CRA and Telecom do not agree with Covec's view that there are barriers to entry to the fixed to mobile "market".

F DYNAMIC EFFICIENCY

- 76 In this section, Telecom responds to submissions made on the potential impacts of regulation on future investment in mobile markets.
- 77 Investments in mobile services technology are large scale and risky. Both Telecom and Vodafone have informed the Commission that the Draft Report would, if finalised in its current form, set a precedent that will delay future investment. If the Commission were to regulate 2G networks, some of which are still relatively new, this would set a precedent that must be factored into future investment decision-making. Telecom and Vodafone would have to consider the risk of regulatory intervention 3-4 years after an investment has proved successful, and assess and time investments accordingly.
- 78 In the face of these likely consequences of the Commission's proposal, TelstraClear has argued at length that the scope of the proposed regulation should be extended to cover voice services on 3G networks. TelstraClear has not committed to mobile network investment, despite operating in New Zealand telecommunications markets (in one form or another) for over 10 years. Nevertheless, TelstraClear submits 3G investment by Telecom and Vodafone will be "low cost" and "low risk".
- 79 TelstraClear argues that because the investments proposed by Telecom and Vodafone are additional to existing infrastructure, rather than a greenfields network, dynamic efficiency considerations do not arise. TelstraClear claims that Telecom and Vodafone are committed to making 3G investment, but does not say precisely what particular investments Telecom and Vodafone have committed to and the timing of this "committed" investment. Nor does TelstraClear explain why regulating "committed" investment that has yet to be made will not deter investment in the future.
- 80 Overall, TelstraClear suggests that Telecom and Vodafone leisurely layer investment on investment, quietly earning a return on one before making the next. TelstraClear's submission is encapsulated in the following: (paragraph 56(d))
- Providing Telecom and Vodafone with a guaranteed source of economic profits from 3G mobile termination will weaken the disciplines on Telecom and Vodafone to invest efficiently.*
- 81 To suggest that a "guaranteed source of economic profits" exists in mobile markets is frankly incredible.
- 82 The view from the market place could not be more different. Every investment is a risk, and no return is guaranteed. Telecom and Vodafone

make large investments in order to generate a competitive advantage, and every such investment is immediately at risk of being superseded by a competitive response. It is irrelevant whether these large, risky investments build on an existing network or are in a separate network. As discussed in Telecom's submission on the Draft Report, in selecting the CDMA technology path Telecom saw an opportunity to deliver 3G services well ahead of Vodafone with 1XRTT and EVDO technologies. Telecom fully expects Vodafone to respond with a substantial investment in UMTS 3G technology. This will likely require a commitment of hundreds of millions of dollars, and Telecom does not expect Vodafone will wait until Telecom has earned a "guaranteed" economic profit!

- 83 This highlights a further dynamic efficiency impact, which is the impact of the proposed regulation on technology choices. Telecom expects to continue along its current investment trajectory, which involves investing in a mix of upgrades and add-ons to existing infrastructure, and in completely new network infrastructure. Potential future investment paths for Telecom include the continued roll-out of EV-DO, investment in EV-DO Rev A, EV-DV, UMTS or WiMax. Contrary to TelstraClear's assertions, all of these investment paths require substantial investment – in some cases, hundreds of millions of dollars. If Telecom is to stay competitive, it must constantly reassess its options to ensure it has selected technology options that deliver the best services and access the world wide economies of scale that support cheaper and better handsets and applications. None of the decisions that Telecom will make about investment in mobile infrastructure are binary decisions – there are always a number of options to be considered, and any uncertainty introduced by regulatory intervention in the sector will need to be factored into, and therefore potentially distort, any decision-making process. In particular, regulation of some options, but not others would seriously distort Telecom's decision-making.
- 84 To put the TelstraClear submission in context, Telecom noted in its Submission that the Draft Report made a very strong claim – the Commission's cost benefit analysis includes no dynamic efficiency effects at all. The Draft Report argues this is defensible because the proposal excludes 3G. Telecom and Vodafone have responded with an explanation of the impact of 2G regulation on investment incentives.
- 85 TelstraClear has submitted, however, that regulation could extend to 3G and still excludes dynamic efficiency impacts from the analysis. To support this TelstraClear has argued investment by mobile operators is low risk and low cost, which is directly contrary to the information supplied by Telecom and Vodafone, and observable competition in the market. TelstraClear has also suggested all 3G investment is committed, without supporting this claim with specifics. Again, this is contrary to the information supplied by Telecom and Vodafone.

G SERVICE DESCRIPTION

86 In this Section, Telecom responds to submissions made on the issue of service description.

Distinguishing between 2G and 3G

87 TelstraClear proposes a new “functional-based” definition of 3G. TelstraClear does not acknowledge that the Telecommunications Act already defines “third generation cellular telephone network” as:

Third generation cellular telephone network means a cellular telephone network based on the IMT 2000 set of radio technology standards as recognised by the International Telecommunication Union.

88 This definition leverages off the expertise and standing of the International Telecommunication Union, and provides a clear delineation between 2G and 3G networks. The definition proposed by TelstraClear, based on “functional” or performance levels, would give rise to measurement and enforcement difficulties. Telecom submits the existing definition of 3G should be used.

89 The key issue with the current definition of 3G is the application of this definition in the Commission’s Draft Report, rather than the definition itself. As Telecom noted in its Submission, the cost benefit analysis in the Draft Report assumes all current voice traffic would be regulated. This is inconsistent with the statutory definition of 3G, which includes CDMA 1XRTT. As Telecom noted in its Submission, it is not clear whether this is the result of a misapplication of the statutory definition, or whether the Commission is proposing to draw a distinction between “current” and “future” 3G networks. If the Commission intends the latter, this will have a disproportionate and significant impact on Telecom, penalising Telecom for being the first to make the substantial investment to bring 3G services to customers, and rewarding Vodafone for being the follower. This would cause very significant distortion in the mobile services market.

Mobile to mobile termination

90 The conflicting submissions received by the Commission on mobile to mobile termination reflect in part the inconsistencies in the service description proposed in the Commission’s Draft Report (discussed in Telecom’s submission).

91 It is not clear to Telecom whether the Commission intended to exclude mobile to mobile termination from the draft service description. If this is being raised as a question, then Telecom’s submission in response is that if termination rates are to be regulated this should occur in the least

distortionary manner. Regulating one form of mobile termination and not another would create a very serious risk of arbitrage, potentially distorting prices and volumes across fixed and mobile networks as traffic can be routed from one to the other. Telecom notes Vodafone has submitted the Commission has not consulted on mobile to mobile termination. This is not correct – Telecom refers, for example, to paragraph 1 of the Draft Report, which makes it clear “mobile termination” refers to the termination of both fixed to mobile and mobile to mobile services. What has not been considered, however, and will be impossible to assess with any confidence, is the possible impacts of regulating one form of mobile termination and not another.

Cost measure

- 92 Both Vodafone and TelstraClear dispute the benchmarked estimate of cost used by the Commission in its cost benefit analysis, although they would recommend different corrections, and both raise issues with the more detailed regulatory measure of cost proposed by the Commission. Telecom notes the proposed service description differs from the fixed interconnection services currently in the Act in that it does not give the Commission an option to select a single cost measure to avoid the significant distortions that would flow from an asymmetry of regulated rates.