



EWNZ

**RESPONSE TO THE COMMERCE COMMISSION ON
TELECOMMUNICATIONS ACT 2001:
SCHEDULE 3 INVESTIGATIONS INTO AMENDMENTS INTO
THE ROAMING AND CO-LOCATION SERVICES**

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Summary of Key Conclusions

- The Commission must finalise the current mobile services investigation to lay the groundwork for facilities-based competition.
- Commercial negotiations on roaming and co-location have markedly progressed since the October Report, but their successful conclusion is contingent upon completion of the current investigation process.
- Only facilities-based, same-technology competition will provide the competitive environment essential for the long-term benefit of end-users.
- The Commission must eliminate the spectrum gap created by the lack of 900 MHz spectrum for new market entrants in order to ensure nationwide competition.
- In light of the particularly difficulties of entering a market at nearly 100% penetration, the Commission must take action to prevent any anti-competitive behaviour of the SMPs, such as pocket pricing, closed network pricing, and contract lock-ins.

EWNZ is grateful to the Commission for its detailed analysis of mobile market competition issues and this opportunity to comment.

1. Introduction

- 1.1 Econet Wireless New Zealand Limited ("**EWNZ**") agrees with the Commission's detailed analysis of mobile market competition issues and its findings regarding competitive barriers to entry contained in the Commission's October Report. EWNZ and its investors would like to thank the Commission for this opportunity to submit on the issues raised in the Commission's Issue Paper.
- 1.2 These submissions consist of an executive summary and answers to each of the questions in the Issues Paper. In addition, EWNZ has taken up the Commission's invitation to submit on additional matters, which are included at the end of the Issues Paper discussion.¹
- 1.3 Attached to this submission are several appendices with additional and supplementary information, including a Glossary and a Bibliography, at Appendices 1 and 2.
- 1.4 These submissions make use of an abbreviated reference to reports and other documents, details of which are contained in the Bibliography.
- 1.5 These submissions include information for which EWNZ seeks protection under the Telecommunications Commissioner's Confidentiality Order². Restricted Information has been marked in bold and enclosed between square brackets and designated as EWNZ Wireless New Zealand Limited Restricted Information as "**EWNZRI**". In addition, this submission includes some highly sensitive and/or confidential information for which EWNZ has requested additional protection. This information is enclosed in square brackets and designated as information requiring Additional Protection as "**EWNZAP**".

¹ *Issues Paper*, para. 73.

² Order made by the Commerce Commission under section 100 of the Commerce Act 1986, as applied by section 15(i) of the Telecommunications Act 2001, dated 15 December 2006.

2. Executive Summary

New Zealand is the only OECD member with no same-technology mobile competition.

- 2.1 The New Zealand market is characterised by high retail prices and low mobile services usage.³ The Commission concluded in the Commission's MTR Final Report that:⁴

...New Zealand's higher prices are likely to be indicative of lower competitive pressures.

- 2.2 The Commission further noted a lack of increased usage and new entry, stating in the October Report that:⁵

In a market with significant fixed costs, relatively high prices when compared to other OECD countries and low usage, competition would be expected to lead to existing operators seeking to increase usage on their networks, in order to be able to benefit from economies of scale. The prevailing market conditions could also be expected to lead to new entry into the market. It does not appear however that competition has been driving significantly increasing levels of usage of mobile services in New Zealand, neither has there been new entry.

The New Zealand mobile consumer suffers from high prices for airtime as a consequence of the current network duopoly.

- 2.3 The OECD report, *Cellular Mobile Pricing Structures and Trends*, illustrates the strong impact of increased numbers of networks on end-user prices:⁶

It can be observed that OECD markets with four or more operators have, on average, exceed[ed] the growth rates of those with three operators, duopolies or monopolies, in every year since 1993. In addition, it is possible to exclude countries with receiver party pays from the markets with four operators. When this factor is taken into account those markets with four or more operators have vastly outperformed the other market structures. This presents a strong message to policy makers to seize future opportunities to increase the number of market players in countries with less than four operators competing in the same markets.

New entry is appearing at 100% penetration; it's not just co-location and roaming that are challenges, but SMP behaviour as well.

- 2.4 In order to relieve end-users of these high mobile prices and increase the uptake and usage of mobile services, including new mobile technology and data services, the Commission must create fertile ground for facilities-based competition.
- 2.5 Barriers to facilities-based competition include (i) two entrenched incumbents with SMP and a monopoly in their respective technologies and spectrum, and (ii) a mobile market nearing 100% penetration.

Commercial negotiations are enhanced by the looming threat of regulation.

- 2.6 Regulatory pressure and change is necessary to produce facilities-based competition in this environment (encouraging entry of a third and even a fourth network operator). It cannot happen otherwise. Without regulation New Zealand will continue to be the only country in the OECD with just two operators and no same-technology competition,⁷ and will continue to languish near the bottom of the OECD price tables.

³ See the October Report, paragraphs 28-32. See also *Benchmarking the Comparative Performance of New Zealand's Telecommunications Regime: 30 June 2005*, MED, Resources and Networks Branch, 21 Dec. 2005, para. 23-26.

⁴ *Commission's Final MTR Report*, para. 241; re-cited in the October Report, para. 35.

⁵ October Report, para. 36.

⁶ At page 18

⁷ *OECD Communications Outlook 2005* reports that Norway and the Slovak Republic alone had only two mobile carriers at 2003. Since that report, both Norway and Slovakia have added third operators (Teletopia and O2/Telefonica, respectively), both of whom rely on roaming to provide nationwide coverage.

Investment is only attracted to reasonable regulatory environments. The October Report has facilitated more realistic commercial negotiations.

- 2.7 Recent developments show that regulatory pressure and change can create the necessary environment for investment in telecommunications.
- 2.8 [] EWNZRI
- 2.9 Prior to the October Report, there were already signs that regulation might change to encourage new network infrastructure entrants, the most significant being the Commission's Decision to Investigate Regulated Services and the Commission's 10th May Announcement⁸ of its intent to investigate the absence of mobile competition which signalled the likelihood of pro-competition changes in the regulatory environment. [] EWNZRI
- 2.10 The Commission's October Report gave cause for real optimism that the regulatory environment would change so that investment in new networks would be commercially viable, particularly the Commission's observations on the lack of incentive to provide a service on appropriate terms in the absence of regulation or regulatory threat.⁹ [] EWNZRI
- 2.11 Without concluded regulation, of course, there is an element of commercial risk that the regulatory process will move against a framework that supports new network investment. Network investment carries substantial risks, and regulatory oversight is required, not to remove those risks, but to ensure competition occurs free from the abuses of SMP. However, EWNZ, its potential investors, and existing operators must make their commercial decisions based on the current environment at each point in time. Strong signals from the Commission that it will move to conclude the regulatory process will encourage commercial resolution.
- 2.12 [] EWNZRI
- 2.13 Those signals have induced Telecom and Vodafone to participate in commercial negotiations over the past few months. In addition, they have led to a draft undertaking from Vodafone which prices voice roaming at 21.5 cpm (plus GST), or 43 cpm (plus GST) where the call both originates and terminates (as roaming calls) on the Vodafone network.
- 2.14 While those prices are usurious, they represent a marked drop from the previous lowest offer made by Vodafone to EWNZ when there was no regulatory pressure. In July 2005 the equivalent proposal from Vodafone to EWNZ was around [] EWNZRI The prices in the Vodafone draft Undertaking are a strong sign in themselves that regulatory pressure (and, if necessary, regulation) will work.
- 2.15 EWNZ and its potential investors are an example of what can happen if the right regulatory signals and prospect for change exists. Without this, the investors could not risk the investment and, in turn, EWNZ could not invest in a new network.
- 2.16 Access to roaming and co-location on satisfactory terms is critical. However, these services don't stand in isolation. Issues such as spectrum (including Vodafone's monopoly of the 900 MHz spectrum), pocket and on-net pricing, and RMA restrictions, are highly material. They are relevant, for example, to price and non-price terms for the roaming and co-location services.
- 2.17 900 MHz spectrum¹⁰ is of particular importance, as its availability has a direct impact on roaming and co-location decisions, and is raised where appropriate

Roaming and co-location are not the only downstream abuses of SMP

⁸ See Commission Release No. 129, 10 May 2006. Of equal import was the subsequent draft report, *Schedule 3 Investigation into the Extension of Regulation of Designated and Specified Services*, Commerce Commission, 30 May 2006.

⁹ *October Report*, para. 119–128.

¹⁰ While there are GSM/UMTS solutions in the 850 MHz band, these solutions are not supported globally and therefore are extremely costly and difficult to implement at the network level and the customer handset level.

throughout this submission. In particular, with the emerging importance of UMTS-900 for rollout of 3G services in the semi urban and rural areas, it is essential that no single operator has the monopoly access to and use of this technology. Appendix 5 provides a more detailed overview of the 900 MHz issues.

2.18 **Pricing:** The key issue to be resolved is the price at which roaming and co-location are to be made available. Setting the designated service pricing too high (such as by using a retail-minus formula) will mean that a third network will not be implemented, or, if it is, may expose the third operator to price squeeze on all or some of the offered services, denying end-users any long-term benefit. Similarly, having narrow constraints on the scope of the services will produce the same result. For example, Vodafone proposes, in its draft Undertaking, that the network acquiring roaming services cannot resell or wholesale (such as by facilitating “thick” MVNOs). Enabling by regulation the development of facilities-based competition (a third or fourth network) will in turn allow unregulated wholesale competition to flourish. Without a third or fourth network, this will not happen.

EWNZ prefers commercial settlement to regulation; however, it is the threat of regulation that creates a pro-competitive negotiating environment.

2.19 EWNZ and its investors would prefer to conclude a commercially viable agreement with the incumbents (Vodafone for roaming and 900 MHz spectrum, and both Telecom and Vodafone for co-location). We expect that other new entrants would share the same view. As the Commission is aware, the regulatory framework is structured to encourage commercial resolution ahead of a regulatory backstop. Commercially realistic agreement will only happen if there is sufficient regulatory pressure on Vodafone and Telecom, such as the signals in the October Report. Either way (a regulatory or a negotiated solution), calls for continuation down the regulatory path, with continued, robust signals from the Commission.

2.20 EWNZ's Conclusions and Recommendations.

- 2.20.1 Only cost-based pricing will achieve outcomes consistent with §18 of the Telecommunications Act. This conclusion is supported by the Commission's Select Committee submissions and recent decisions of the Competition Appeal Tribunal (U.K.). An extensive examination of pricing issues is set forth in support is included in Appendix 1.
- 2.20.2 EWNZ proposes that the Commission should recommend to the Minister a best practices solution (similar to that adopted by the EU). The Commission, during and after the determination phase (that is, not in the service description in the schedule to the Act) should be empowered to select and apply a pricing model on an as-needed basis appropriate for current market conditions. The Commission has dealt with this option in its select committee submissions last year.
- 2.20.3 In the alternative, EWNZ proposes TSLRIC pricing for both co-location and roaming.
- 2.20.4 In view of the lack of publicly available roaming benchmarks, we propose that Initial Price is benchmarked and/or proxied on available data, in particular actual mobile termination rates and from studies of those rates (the most recent illustration of which is the WIK-Consult Report to ACCC).
- 2.20.5 In relation to co-location, we propose benchmarking as the initial pricing principle.

COSTS AND BENEFITS OF AMENDING THE SERVICES

3. To what extent are commercial negotiations being undertaken for the services? [3.1(a)]

- 3.1 EWNZ is currently negotiating with Vodafone for roaming (and also for 900 MHz spectrum), and with both Vodafone and Telecom for co-location.

4. What is the likelihood of commercial agreements being reached for the services? [3.1(b)]

The Commission must complete the investigation into market entry barriers to facilitate commercial negotiations.

- 4.1 Without continued movement toward enhanced regulation, there is little likelihood of EWNZ, or any other new facilities-based competitor, concluding a commercial agreement for the roaming or co-location services. Recent progress in negotiations is a direct reaction to the regulatory process such as the October Report; it is clear that Vodafone and Telecom take the threat of regulation seriously and desire to conclude a favourable commercial deal in order to prevent or forestall regulation.

- 4.2 Commercial agreement will arise only if there is a legitimate threat of actual regulation. Even then, an incumbent may leverage its SMP to compel a more favourable deal; only mandated designation can prevent such future use or abuse of SMP. Therefore, the Commission must conclude the current regulatory process and designate roaming and co-location. It is essential that this is done in a timely way as swift decision making by the regulator and the government is what is required by potential new entrants.

- 4.3 The amendments to the Telecommunications Act (such as the more proactive powers given to the Commission) signal that concluding these investigations is the best course, and provide the Commission with the tools needed to achieve this.

The general theme of prior negotiations has been a willingness to talk, but not to conclude a commercial agreement.

- 4.4 **Negotiations for roaming with Vodafone prior to the October report:** EWNZ has been seeking roaming from Vodafone since 2002. There has been a willingness to negotiate, but not to conclude a commercial agreement. Vodafone's retail tariffs at the time show that the proposed roaming prices were excessive. Roaming rates were proposed for normal tariff, congestion tariff and low load tariff, of [] EWNZRI respectively. That is the price for each leg. If an EWNZ subscriber were to originate a call on the Vodafone network, terminating with another EWNZ subscriber on the Vodafone network, the charge would be double those rates ([] EWNZRI respectively).

- 4.5 These wholesale rates were far in excess of what a Vodafone subscriber would have paid at the *retail* level. For example, on Vodafone's then "Get 300" personal plan, the standard off-peak rate was 17.8 cpm (incl. GST). On a "Daytime 750" business plan, the standard rate for both peak and off-peak calls was 35 cpm (incl. GST). The charge to third party networks for terminating calls on Vodafone's network (to Vodafone subscribers) at the time was 30 cpm plus GST.

- 4.6 Charging a retail customer only 35 cpm incl. GST, and third party networks 30 cpm excl GST, indicates considerable lack of commercial reality in roaming rates [] EWNZRI. As we explain in our description of the network elements at Appendix 6, there is a close relationship between the process, and cost, in mobile termination and roaming. That close relationship is not reflected in the considerable disparity between the then mobile termination rates and the proposed roaming rates.

- 4.7 Even using a retail-price methodology, it is apparent that the proposed rates are unrealistic when the upstream input (roaming) is compared with retail pricing. Additionally, the considerable disparity points to substantial price squeeze considerations.

- 4.8 On 12 July 2005, Vodafone provided a revised proposal, which moved the roaming rates to []EWNZRI At that time, the mobile termination rate was 24 cpm. For the same reasons as the 2002 proposal, this offer was not realistic.
- 4.9 As a consequence of commencement of the Schedule 3 Investigation, Vodafone has provided a draft Undertaking which includes a substantial drop to 21.5 cpm for each leg. While this is still too high, the drop demonstrates that Vodafone will not provide roaming at appropriate rates without regulation or sufficient regulatory pressure.
- 4.10 **Vodafone draft Undertaking:** The draft Undertaking is dealt with in EWNZ's other submissions of 9 March 2007. Those submissions demonstrate that, while it appears that regulatory pressure has led to the proposals in the draft Undertaking, they fall well short of appropriate resolution of roaming and co-location.

5. What is the likely counterfactual for the services? [3.1(c)]

The counterfactual is high prices, limited use, limited investment, and lagging at the bottom of the OECD performance measures

- 5.1 The counterfactual is the continuation of the status quo: two mobile operators, each operating with a different technology (and potentially a small "pocket" network operator limited to central Auckland), no effective competition, and continued astronomical prices for end-users.
- 5.2 The two existing mobile operators both have substantial market power. Without oversight, these operators will continue to use their positions to maintain their control over the mobile communications market. They have a number of means of doing so, the three most powerful being:
- 5.2.1 To deny access to optimal sites (particularly problematic where those sites are in sensitive areas from an RMA perspective), thereby increasing new entrant costs and compelling the new entrant to accept numerous building delays and/or coverage gaps, and the subsequent repercussions of inferior service;
- 5.2.2 To deny access to economically viable roaming, forcing the new entrants to face a barrier the current operators themselves never faced: building a nationwide network without revenue during the construction period; and
- 5.2.3 To deny access to 900 MHz licenses, thereby rendering it economically impossible for new entrants to provide comparable coverage and compete for services, especially 3G.
- 5.3 Under the existing regime, were the Commission to regulate non-price terms pursuant to its existing powers under the Act, the incumbent operators can continue to use non-competitive pricing as a barrier. The failure of non-price regulated services is marked by the absence of facilities-based competition, just as the substantial recent investment in EWNZ and the TelstraClear Tauranga test, both following rapidly on the heels of the Commission's October Report and the 10th May Announcement, respectively, is evidence that there are competitors willing to enter the market provided there is a pro-competitive regulatory environment.
- 5.4 Because the existing operators can deny or dictate the terms for access, it will be impossible for new entrants to introduce competition to the mobile market without regulatory involvement. Without competition, market conditions, including the exceptionally high retail prices, will remain essentially unchanged, New Zealand likely languishing at the lower ends of the OECD mobile market indicators:

Existing operators can use their SMP to destroy or control a new entrant

- No new entrants (or new entrants only on a "pocket" network basis);
- No facilities-based competitors;

- Little or no network investment by the incumbent operators;
- A continuation of high end-user prices;
- Low usage, particularly of mobile voice services;
- Low uptake of high-speed mobile data and 3G services;
- Little or no innovation in open portal software or new services.

EWNZ is confident the Commission can see that resellers are not evidence of true competition

5.5 At its best, the re-sale agreements, about which there was so much publicity early last year as “proof of competition,” will represent the high water mark of competition beyond the two incumbents. As only a facilities-based competitor can create wholesale price competition, it is unlikely that any resale or MVNO agreements will provide any benefits to end-users.¹¹

5.6 It is not appropriate for the draft Undertaking to be considered in establishing the counterfactual. That is so, if only because Vodafone can unilaterally terminate the Undertaking during its 5-year term.¹²

6. What is the likely factual? What would be an appropriate designated roaming service and co-location service? How would the service compare to the services available under the counterfactual (in particular, in terms of pricing)? [3.2(a)]

6.1 The likely factual is that designation results in facilities-based competitive entry to the New Zealand mobile market. Facilities-based competition will bring with it all the benefits that one would normally expect of competitors:¹³

- Lower prices;
- Increased consumer choice;
- Increased investment in infrastructure and technology;
- Reduced economic rents and associated deadweight losses;
- Improvements to downstream markets;
- A more dynamic and efficient market.

6.2 Regulatory changes consistent with these proposed service descriptions will ensure a third entrant at least, and may lead to a fourth entrant as well. It will also ensure long-term competition on a facilities basis within the mobile market. Vigilance with respect to anti-competitive measures available to the incumbent SMPs will be required to ensure a new entrant isn't squeezed out of the market.

7. How would such changes to the current specified services lead to long term benefits for end-users, which would not otherwise have been forthcoming? What empirical evidence is available to support such scenarios? [3.2(b)]

7.1 The proposed regulatory changes would lead to enormous benefits for end-users in terms of price, choice, and service. The designation of services for co-location and national roaming would create an environment of increased certainty for a new entrant that will allow it to plan with financial confidence the timely rollout of its network. In so doing, it will promote facilities-based competition which in turn will lead to service- and price-based competition to the benefit of end-users.

¹¹ While there is evidence that MVNO's and re-sellers can have a beneficial impact on an already competitive market, MVNO's and re-sellers do not create competition in a constricted market with non-competitive pricing, such as New Zealand. The limited history of re-selling in New Zealand supports this conclusion: the current re-sellers of Vodafone and Telecom's services, TelstraClear and Boost, respectively, charge the exact same end-user prices.

¹² *Vodafone Draft Undertaking*, clause 4.2(b).

¹³ See also the OECD Report discussed in para. 2.2, above.

- 7.2 Facilities-based competition entails large fixed costs and low marginal costs. New entrants will have to obtain subscribers and traffic to recover their sunk costs. Where the marginal network cost of traffic is low, new entrants can be very aggressive in pricing, to the benefit of end-users. With mobile number portability, post-paid business customers can also be targeted. Reduced business costs will have additional flow-on effects to other end-users. Ireland is a good empirical example of this (see Appendix 2).
- 7.3 Facilities-based competition (including a third and maybe fourth network) will lead to real prospects of additional opportunities for other operators such as “thick” MVNOs, rather than the constrained reseller model currently proposed by Vodafone.

Roaming and co-location do not mean a new entrant avoids investment but they can prevent being shut-out by the SMP.

8. What is the interrelationship between the roaming and co-location services? How does the price of one service affect the other? [3.2(c)]

- 8.1 Roaming and co-location are each an essential component of the business case of a new entrant seeking to enter a highly-penetrated duopoly market. They are inter-related because they are mutually supporting; the absence of either makes it economically unviable to compete on a national basis:
- Without roaming, a new entrant cannot compete until it has built a national network from scratch;
 - Without co-location, a new entrant will find it difficult to construct a national network because of a lack of access to essential optimal sites.
- 8.2 Roaming and co-location are not, therefore, about a new entrant avoiding network investment, but about ensuring that new entrants have the time and capability to construct competing infrastructure. The Commission has recognised that economies of scale, density, and enduring economic bottlenecks call for long-term access to roaming in some areas.
- 8.3 In the primary network build phase – the first 5-10 years of operation – both services are required. As the network becomes more robust, however, a rational business operator will seek the “least cost” decision as to whether to continue roaming or to pursue additional network construction opportunities. The factors a new entrant must consider can be summarised in the following formulas:

$$\text{Roaming cost} = \text{Traffic} \times \text{Roaming rate}$$

$$\text{Network Build cost} = \text{Annualised capital costs} + \text{Operating costs}$$

- 8.4 There is only a tenuous relationship between the price or availability of one service and the price or availability of the other. As can be seen in the formula above, there is a direct relationship between the cost of roaming and the cost of network construction; however, co-location is only a small, though not insignificant, component of the network build cost, and therefore there is only a limited impact on the Network Build cost.¹⁴ The price of one service is therefore unlikely to affect the price or availability of the other.

¹⁴ For a similar conclusion, see, e.g., *Vodafone submission on draft report on extension of regulated services*, 26 June 2006, para. 24.

900 MHz spectrum is a critical component of co-location and roaming decisions.

Amendments to the services are critical components to competition; however, the Commission needs to simultaneously comment on other downstream abuses of SMP.

Designating the services signals that incumbents cannot use their SMP to deny access to the market.

8.5 A third, and particularly important, inter-related component is 900 MHz. The availability of 900 MHz spectrum will have a more significant impact on a new entrant's "least cost" approach than either roaming or co-location.¹⁵ Even with co-location, a new entrant cannot construct rural networks without access to 900 MHz. Therefore, roaming will be required at competitive rates over the long term absent re-allocation of 900 MHz spectrum. Spectrum issues are covered in more detail in Appendix 5. In addition, the pricing solutions outlined in Appendix 1 are designed to accommodate the impact of spectrum availability.

9. To what extent would amendments to the regulated service reduce barriers to entry? [3.2(d)]

9.1 EWNZ's proposed amendments to the services will reduce barriers to entry by ensuring access to roaming and co-location at cost-based prices on a non-discriminatory basis. Cost-based, wholesale services permit a facilities-based competitor to compete directly for end-users. Such price-conscious competition is particularly important in New Zealand, where high market penetration rates and the substantial market power of the two incumbents constitute huge barriers to market entry.

9.2 The overall reduction in market entry barriers will be highly dependent on:

9.2.1 whether the Commission will be able to define a realistic cost-based pricing principle that does not constitute a windfall to the incumbents,

9.2.2 whether there is a proportionate re-allocation of 900 MHz spectrum to existing mobile spectrum managers, and

9.2.3 whether the Commission can limit the ability of the incumbent operators to use their substantial market power to forestall competition.

9.3 The current regulated services do not reduce barriers to entry; the incumbent operators can continue to deny access solely through pricing. This is outlined by the Commission in its October Report, and is evidenced by New Zealand continually languishing at the bottom of the OECD retail price tables.

10. In principle, what benefits and costs do respondents consider would result from designating the services (that would not eventuate in the absence of such designation)? [3.3(a)]

10.1 The benefits of designation are self-evident:

- Incumbent operators will be motivated to conclude commercial agreements;
- EWNZ, and possibly other parties, will introduce facilities-based competition;
- Increased competition will produce long-term benefits for end-users, including lower costs, increased usage, improved quality of service, additional investment in new technology, and a more rapid uptake of new technology;
- Increased economic efficiencies arising from improved utility of existing infrastructure and the economic recapture of excess profits.

10.2 The costs of not designating roaming and co-location can readily be seen in the lack of competition and high end-user prices. Facilities-based competition has not and cannot occur without regulatory support on roaming, co-location and

¹⁵ See, e.g., the *Australian Financial Review*, 31 January 2007, which reports that Optus could reduce the cost of building 3G in country areas from A\$800M to \$500M if it could use 900 MHz spectrum; Table 6-20 in the *WIK-Consult Report to the ACCC* in January 2007 reports 60 to 80 per cent reductions in the number of BTSs required for a 3G network with access to 900 MHz spectrum.

spectrum availability (and protection against anti-competitive measures, as noted in para. 55, Other Matters).

11. Should these benefits and costs be evaluated in qualitative or quantitative terms (or a combination)? Is there any particular modelling approach that should be adopted to best evaluate the benefits and costs? [3.3(b)]

- 11.1 Qualitative. A qualitative analysis is most appropriate under these circumstances; the October Report demonstrates that the case for regulatory change is so compelling that quantitative analysis is not required.
- 11.2 For example, in the UBS determinations the Commission decided a qualitative cost-benefit analysis was sufficient.¹⁶ The Court of Appeal has not required a quantitative analysis in every case.
- 11.3 A quantitative analysis is unnecessary in these circumstances, as it will lead to the same conclusions as a qualitative analysis, and would likely prove counter-productive unless assessed at the most basic level. A complex quantitative analysis would simply further delay implementation of the designated services.
- 11.4 While the Commission's review should be robust, the length of time it takes to undertake a quantitative analysis is a relevant consideration. That delay comes at considerable cost to the long-term interests of the end-user, as inadequate competition and high prices continue during the quantitative analysis and creates a greater challenge for new entrants as penetration and incumbents' network coverage increase. In this instance, such an analysis is unlikely to benefit the Commission materially in its decision making, and the delay would only be to the incumbents' advantage.
- 11.5 In addition, a quantitative analysis can focus only upon the static equilibrium analysis, when of far greater significance to determine the §18 benefits are the dynamic efficiencies that would arise from designation. The cost-benefit analyses of the past demonstrate that the quantitative aspect of the analysis has not materially contributed to the Commission's conclusions. In part, this is because quantitative analysis cannot take into account dynamic efficiencies, which are of particular importance in these proceedings.
- 11.6 We therefore suggest a qualitative analysis.

12. To what extent have parties themselves conducted or intend to conduct a quantitative assessment of the impact of designating roaming and co-location services in New Zealand (for example, by modelling the impact of designation on the business case of a new entrant)? [3.3(c)]

- 12.1 EWNZ and its investors have conducted extensive modelling on the business case for new entry based upon assumptions about likely changes to roaming, co-location, and 900 MHz, consistent with the Commission's findings in the October Report.
- 12.2 EWNZ considers both roaming and co-location essential services for the purpose of meeting its business case and for investment in the mobile communications sector.

13. What empirical evidence is available from overseas jurisdictions on the impact regulating roaming and/or co-location services (or the threat of regulation) has made on new entry? [3.3(d)]

- 13.1 Regulatory pressure is required to break commercial impasse and motivate commercial settlement from reluctant SMPs, as international case studies demonstrate.

International experience shows that regulatory pressure is always needed to promote new entry.

¹⁶ Commerce Commission Determinations 568 and 582.

- 13.2 **Ireland:** The Irish experience is particularly relevant, given its size, which is comparable to New Zealand. The third entrant, Meteor,¹⁷ has been able to flourish, and as a consequence end users have benefited with wider choices and lower prices, in part because a wholesale market has developed. Meteor have moved from having no national roaming (until this was provided following regulatory pressure) to the point where it could move late last year to a significantly better commercially negotiated agreement (with Vodafone instead of the original provider, O2).
- 13.3 We have set out a detailed overview in Appendix 2, with further information in Appendix 5, dealing with spectrum. New Zealand is a much more heavily saturated market than when Meteor first entered the market (New Zealand is approaching 100% penetration, while Meteor entered the market at around 65% penetration), which indicates even further need for regulatory support.
- 13.4 **Australia:** Australian experience is helpful as noted in the *October Report*.¹⁸ Regulatory pressure in 1997/1998 appears to have led to commercially negotiated roaming.¹⁹ In late 1997, ACCC considered requiring mandatory roaming, but then announced it would not do so, on the grounds that the mobile market was competitive and that roaming would probably be offered commercially.
- 13.5 While ACCC decided not to regulate roaming in its 2004 report, *ACCC Review of Mobile Domestic Inter-Carrier Roaming Service*, the key reason was the existence of sufficient competition and availability of commercial roaming agreements, given the number of potential providers of roaming services. This is contrary to the duopoly position in New Zealand, and the presence of only one GSM/W-CDMA provider. In that 2004 report, ACCC noted the Telstra dominance in respect of CDMA roaming but decided to leave this for later review if necessary (it's apparent that, if a new entrant was unable to get roaming on realistic terms from Telstra, ACCC would revisit the position (and so the regulatory pressure remained)). Just as the Commission has concluded in New Zealand, ACCC decided that CDMA roaming had its own market separate from GSM.
- 13.6 **Slovenia:** Slovenia is an EU state: it is an example of what happens where there is regulatory failure and lack of regulatory pressure. In Slovenia, the third entrant, Veda, has failed due to inadequate regulation. Details are outlined in Appendix 3. Slovenia has joined that special group of which New Zealand is a member: OECD countries with mobile duopolies.
- 13.7 **Other countries:** Experience in other countries is outlined in Appendix 4.
14. **Do respondents have a view on how any interplay between roaming and co-location should be accounted for in the Commission's assessment of the benefits of any amendments? [3.3(e)]**
- 14.1 Co-location and roaming services are mutually supporting; they are part of the three essential requirements for facilities-based competitors (along with 900 MHz). Absence of either will substantially impair the impact, benefit, and efficacy of the remaining services in helping to promote new entry and competition. In assessing the benefits of any amendment to the regulated services, the Commission must take into account the reduced benefit that designation of either service would receive without designation of the other service.

¹⁷ [] EWNZRI

¹⁸ *October Report*, para. 132.

¹⁹ See Para. 3.2.1 in the *OECD 2002 Report*.

Co-location means long-term sustainable competition; roaming is a temporary solution during infrastructure build.

- 15. Could one service act as a substitute for the other? If so under what conditions? [3.3(f)]**
- 15.1 No. Roaming and co-location are both critical for facilities-based competition; they are *not* substitutes for one another. The roaming and co-location services are related – roaming obviates the need to build excess network infrastructure prior to launch of commercial services, and hence co-locate, and co-location allows an operator to build out its network, reducing a new entrant's need for roaming support over time. However, regardless of whether and at what cost co-location is made available, wholesale, cost-based roaming will be needed during network build-out, and on a permanent basis if access to 900 MHz spectrum is not guaranteed.
- 15.2 Similarly, co-location is needed for the facilities-based competitor to construct its network. The availability of one service, or wholesale cost-based pricing for only one service, is not a substitute for wholesale, cost-based access to the other service.
- 15.3 A substantial market power, on the other hand, prefers to offer only roaming, as co-location allows a new entrant to compete over the long-term at the network level. With roaming, an SMP can limit the effects of wholesale competition on its costs and prevent network competition for both services and pricing.
- 15.4 The ACCC, in its 2004 Review of Mobile Domestic Inter-carrier Roaming Service, correctly concluded that roaming and co-location are not substitutes for each other.²⁰

In the Commission's view, the sharing of poles and towers is unlikely to be a substitute for domestic inter-carrier roaming. First, in the absence of spectrum sharing ... it is not a substitute for those carriers who do not hold spectrum. Second, the carrier (seeking roaming) still bears much of the cost of network deployment which is unlikely to be attractive in areas of low traffic volume. This appeared to be borne out by market inquiries.

²⁰ ACCC Review of Mobile Domestic Inter-Carrier Roaming Service (December 2004) page 23 <http://www.accc.gov.au/content/index.phtml/itemId/333898>.

SERVICE SPECIFICATION: ROAMING

Roaming should be available only to significant investors in infrastructure

16. Should the requirement to cover 10% of the area in which the New Zealand population normally lives or works before accessing the roaming regulation still be in place? [4.1(a)]

16.1 EWNZ agrees that the 10% threshold is appropriate. A threshold is required to help encourage facilities-based competition, and ensures that new competitors demonstrate their commitment to roll out a nationwide service. [EWNZRI]

17. If so, what should the 10% cover – population or area? [4.1(b)]

17.1 Population. Area is not a realistic measure in practical terms, given the disparity between population densities and the physical geography.

17.2 A 10% area requirement would constitute an almost insurmountable burden, is economically inefficient, and would substantially delay competition. An area requirement is therefore contrary to the Act.

17.3 Problems with an area requirement include:

17.3.1 The inefficient use of resources:

- a mobile operator can cover 80% of the population by covering only 2% of the total land area (see chart, top of the following page²¹);
- such a requirement promotes investment in geographic area in lieu of investment in covering population or providing more robust services;

17.3.2 A substantial delay in competition; Vodafone and Telecom, after over a decade of network construction, are only beginning to cover above 30% of the area.

17.3.3 It is extremely difficult and significantly more expensive without access to 900 MHz spectrum.

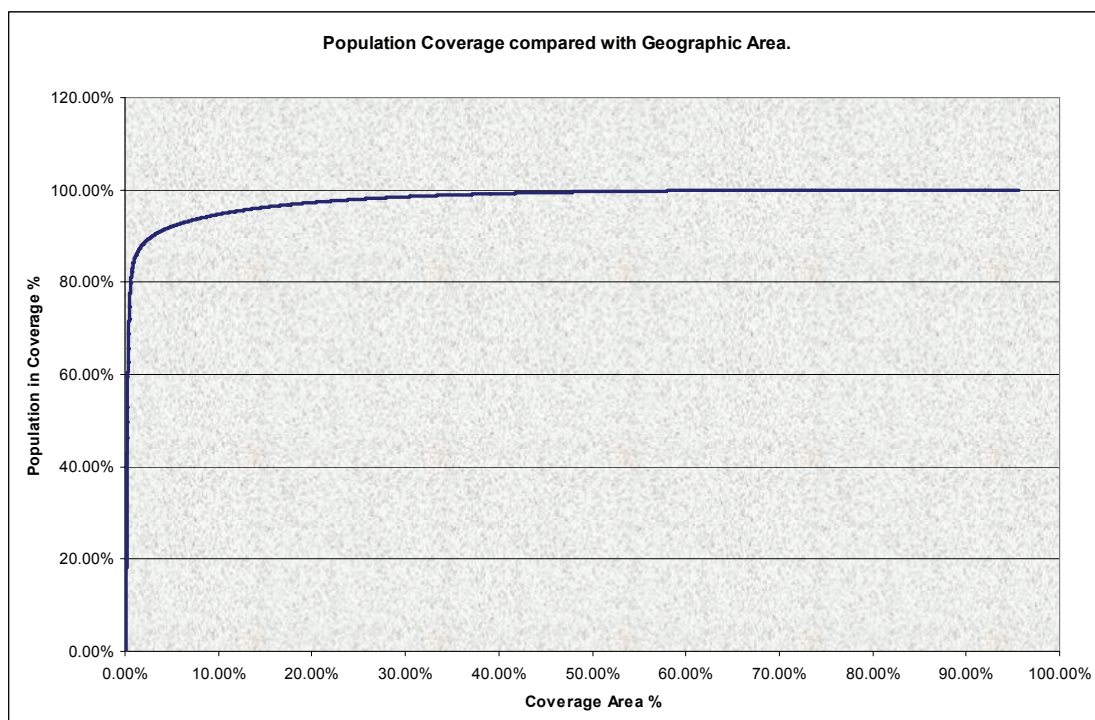
17.4 The 10% population coverage requirement provides the new entrant with sufficient flexibility in its network design and roll-out to ensure that competition is brought to end-users at the earliest possible time, and without a waste in resources available for infrastructure investment.

An access seeker should be required to build out a national network.

18. Should an access seeker still be obliged to commit to rolling out a national network? [4.1(c)]

18.1 Yes, but a national network should be considered a network that provides coverage to at least 80% of the population. (See para. 19, below.)

²¹ Source: New Zealand Census Data 2001, Department of Statistics.



18.2 As the Commission has previously noted, requiring new facilities-based competitors to build a network as large as either Vodafone or Telecom is inefficient and unnecessary:²²

Regulatory intervention will have to be calibrated to account for likely geographic differences in the extent to which assets can be replicated. For instance, conditions of replicability may be radically different between a concentrated and highly populated urban area where economies of scale/density may be quickly exhausted and a rural/provincial area with more scattered population.

18.3 Vodafone also acknowledges that a nationwide build-out is not necessary:²³

The roaming service that we would make available has two purposes: Temporary assistance while building – The roaming service will remove:

- *coverage and network quality as competitive differentiators for a new entrant. The entrant will use our network while it builds.*
- *Full coverage in the longer-term – In some places it may never be economic to replicate Vodafone's radio access network. Roaming on Vodafone's network therefore provides a way for an entrant to offer full geographic coverage, regardless of the economics of building a full coverage network.*

18.4 And at the Conference during the Renewal of Regulated Services Review, Vodafone said:²⁴

Vodafone is, and remains happy to offer both co-location and roaming on standard and reasonable terms. We do not require entrants to build out. We are more than flexible about the timeframes for these agreements.

²² Commission's Select Committee submissions; clause 22.

²³ Vodafone Submissions supporting Draft Undertaking, para. 35.

²⁴ Statements of Hayden Glass, Vodafone Regulatory Manager, Conference to Consider the Commission's Draft Report on the Review of Regulated Services (15 August 2006) page 6. <http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/Investigations/ContentFiles/Documents/Conference%20Transcript.pdf>.

- 18.5 As well as making more efficient use of underused resources, a limit on the scope of a nationwide build-out is also dictated by the absence of 900 MHz spectrum. Without 900 MHz spectrum, a facilities-based competitor cannot provide nationwide coverage in a commercially viable or even remotely cost effective manner; 1800 MHz and 2.1 GHz spectrum is simply too inefficient for remote area coverage, such as primary motorways outside major urban centres, or strong in-building coverage.
- 18.6 EWNZ agrees with the points made by the Commission in the October Report that there should be a minimum network roll-out but there should still be ability to roam in some areas in the longer term. To encourage facilities-based competition in the long run requires a high threshold for the network roll-out.²⁵

A “national” build-out should constitute 80% population coverage.

19. If national roll-out is unnecessary, should there be a minimum roll-out (% of population) necessary? [4.1(d)]

- 19.1 As noted in para. 18, EWNZ submits that 80% population coverage is appropriate. A minimum population coverage commitment, rather than an area requirement (such as a “national coverage” requirement), is typical of the approach taken in other countries.²⁶ This is a portion of the population that a new entrant can be reasonably be expected to cover even without 900 MHz, and would be achievable within a reasonable time frame. See chart referred to in 17.3.3, above.

In-coverage roaming will be essential for the first couple of years.

20. Should roaming cease to be available in particular areas as a new entrant builds out its network? [4.1(e)]

- 20.1 Yes, as requested by the access seeker through the definition of exclusion zones (discussed in more detail in para. 25, below). Access seekers have an inherent interest in moving end-user traffic to their own infrastructure in order to maximise profits and prevent undue subsidization of the access provider’s network through roaming fees. Access providers have an interest in sharing high-capacity traffic by freeing their sites from the burden of providing roaming coverage in high-traffic zones, zones where the access seeker will wish to first build its infrastructure in any case.
- 20.2 Upon termination of the roaming service within an area in which both operators provide service, the carriers can readily negotiate commercial agreements, such as to provide redundant service in the event of natural disaster or temporary network outages.

There should be no sunset without 900 MHz; a 10-year sunset otherwise.

21. Should there be a sunset clause for the provision of roaming? [4.1(f)]

- 21.1 No. A sunset clause is inappropriate because:
- Sunset clauses promote inefficient construction of duplicative infrastructure in areas where existing infrastructure is already, and will continue to be, under-utilised;
 - A lack of access to 900 MHz for new entrants makes it extremely difficult and expensive to duplicate the coverage of 900 MHz spectrum holders.

²⁵ Commission’s MTR Reconsideration Report, para. 11, 13.

²⁶ The WIK-Consult Report to the ACCC in January 2007 noted that “Australian MNOs do not have an explicit licence condition to provide a certain degree of geographic or population coverage of their networks. [But] ... the specific population distribution characteristics of Australia [mean] a mobile network which is capable of providing services to 96 per cent of Australia’s population, covers physically only about 20 per cent of Australia.” (p. 56). In Ireland, COMREG requires a new 3G entrant to cover 20% of the population of Ireland, in order to have roaming; Part 6, National Roaming in the Vodafone 3G Licence. The Commission itself has noted several instances in overseas jurisdictions where coverage requirements attached to regulated roaming services are sub-national. See October Report, para. 151-153.

21.2 EWNZ agrees with Vodafone's statement that roaming should remain available essentially in perpetuity in areas where the construction of additional infrastructure would be inefficient (see para. 18.3).

21.3 In addition, roaming will be required if new facilities-based competitors are not provided access to 900 MHz spectrum. Only with the 900 MHz spectrum can commercial operators build-out coverage comparable to, and competitive with, the coverage offered by the existing operators, and it is the only means by which a new entrant compete for the provision of UMTS-900 services.

3G roaming must be regulated; consumers do not differentiate between networks when making calls: it's all a mobile network.

Without including 3G, SMP abuse will simply move from 2G to 3G.

22. Should the amended roaming regulation include 3G-3G roaming? [4.1(g)]

22.1 Yes. The Commission's roaming decision must not discriminate between 2G and 3G services. Dictating a technology uptake path and substituting the Commission's judgment for that of the new entrant's in investment decisions is unlikely to yield an optimum investment or promote the long-term roll-out of 3G or new technologies. In addition, customers do not differentiate between 2G and 3G network; they are just mobile networks. Qualitatively, denying access to 3G would be akin to denying access to other components of standard mobile service, such as SMS messaging or data; such a regulator-created differentiation in service would clearly be used as a competitive differentiation in service by the access provider.

22.2 The Commission has previously addressed the risks of segregating technologies in the *Commission's MTR Reconsideration Report*.²⁷

...the Commission has concluded that it is difficult to align technology characteristics with the investment incentives the Commission sought to create in attempting to distinguish between different generations of cellular network technology. Defining the scope of regulation by including circuit-switched technology while excluding packet-switched technology would also be inappropriate.....

The recommendation [in the initial decision] to distinguish between 3G and non 3G network technology was introduced as a result of the Commission's conclusions that 3G voice termination should not be regulated because of the perceived risk that such regulation would cause a dynamic efficiency detriment, slowing or limiting deployment of 3G networks and possibly discouraging investment in other new technologies that would benefit end users of telecommunications services.

The Commission is satisfied that Vodafone and Telecom's actions in proceeding with the roll-out of their 3G networks in the face of regulatory uncertainty are explicable by competitive pressures and the opportunity to achieve lower network operating costs. The Commission expects that the operators will continue to expand 3G network coverage and that the benefits to the operators of doing so will outweigh the impacts of mobile regulation. The Commission now considers that the likelihood of regulation slowing or limiting investment in 3G services is small.

22.3 In its October Report, the Commission, when addressing roaming on 3G networks, confirmed that "Telecommunications regulation should be forward looking"²⁸. 3G is a currently available service which is progressively being rolled-out. [] EWNZRI It is a service which is available during the Commission's normal 2 to 3 year review window.²⁹

²⁷ *Commission's MTR Reconsideration Report*, para. 11, 13, and 14. Further reasons and detail are set out at pages 62 -71 of the same report.

²⁸ October Report, para. 194.

²⁹ Id., para. 107.

- 22.4 This conclusion was also reached by the Commission in the context of addressing mobile voice termination regulation, For example, applying the mobile termination approach to roaming):
- 22.4.1 Roll-out of 3G (which of course is a voice and data service) is *“explicable by competitive pressures and the opportunity to achieve lower network operating costs”*³⁰.
- 22.4.2 The likelihood of 3G roaming regulation *“slowing or limiting investment is small.”*³¹ It’s happening regardless of regulatory issues.
- 22.4.3 There are the difficulties, identified above, of treating circuit switched and packet switched technology differently. Further an approach which is technology-neutral is preferable where possible, and these are 2 technologies that are currently available. This was a driver behind the mobile termination reconsideration and the same point applies to roaming in respect of 2 currently available and well understood services.
- 22.5 A forward looking approach would have the Commission moving immediately to technology-neutral cellular roaming, including 3G voice and data.
- 22.6 It is unlikely that regulation of 3G roaming will slow or limit investment. 3G roaming encourages new entrants to deploy 3G infrastructure to capture the 3G revenue provided to the access provider. The deployment of competitive 3G infrastructure in turn would creates competition between the new entrant and the access provider for the quality, quantity, and variety of 3G services. It is therefore dynamically efficient to ensure competitive 3G roaming is made available to access seekers on the same basis as 2G roaming.
- 22.7 Restricting roaming to 2G services, on the other hand, dictates the technology choices of the new entrant, who must select 2G in order to compete on coverage. In addition, a lack of 3G roaming is likely to discourage either the access provider or the access seeker from investing in 3G infrastructure or services. The access provider is discouraged from aggressively investing in 3G as there would be no competition in the 3G sphere; the new entrant because they would be unable to compete on 3G coverage. A limitation on 3G roaming is therefore dynamically inefficient.
- 22.8 [] EWNZRI
- 22.9 If the Commission does not take this opportunity now, deferring the decision until later may cause or contribute to market failure and failure to meet the goal of developing new networks.
- 22.10 In particular, the time period, from considering whether to launch a Schedule 3 investigation, to a final determination on the price and non-price terms of the service, would be in the order of 3 years. This is a conservative estimate compared with the time it has taken mobile termination to get from the Commission considering whether to investigate, to the point of the Minister deciding whether to implement the Commission’s recommendation, let alone the time it will take for the Commission to decide termination rate benchmarked pricing and other terms on a standard terms application or application by an access seeker.
- 22.11 For example, the TelstraClear UBS application took 13 months from filing of application to determination. Thus considering whether to investigate can be measured in months; the subsequent time for investigation can be seen as most of one year; the consideration by the Minister is measured in terms of months.

³⁰ Commission’s MTR Reconsideration Report; para. 14.

³¹ Id.

Then, assuming 3G roaming is regulated, the determination process, followed by implementation period, would typically occupy around a year. There are few if any examples where these processes have happened any quicker and it is important to be realistic about them.

- 22.12 In the meantime, the incumbent, whose expense and risk can be properly compensated anyway, can game the position and continue to enhance its market power.
- 22.13 Frontier Economics, in a submission to the Commission prepared for Vodafone, provided some indication of the negative economic impact of further delay.³² In their report, Frontier estimated the possible impact of a year's delay in 3G deployment was an annual economic loss of between \$80.5M (total surplus) and \$105.6M (consumer surplus).

Data must be included in the roaming service; New Zealand lags in mobile broadband uptake, which will be ameliorated by data competition.

23. Do value-added services, as set out in the current roaming service description, include data services? Should data services be specifically included in the roaming service description? [4.1(h)]

- 23.1 To avoid doubt, there should be express reference to data bearer services in view of their importance to the provision of a variety of value-added services that a new entrant may wish to offer end-users. This will have the added benefit of increasing competition for, and uptake of, data and other new services.

24. What provisions need to be made to facilitate data roaming? [4.1(i)]

- 24.1 Much of the detail can be resolved during the determination process, provided the service description makes seamless, non-discriminatory provision of data, SMS, and other services a minimum requirement.

25. Are there any technical issues associated with voice roaming which the Commission should be aware of? [4.1(j)]

- 25.1 EWNZ is not aware of any reason technically why the service cannot be made available. Same-technology international and national roaming has been implemented in thousands of agreements around the world; standardised technical specifications for implementing roaming are available from the various standard definition groups for all major communications systems. These details can be resolved if necessary on application for determination or pursuant to a standard terms determination.
- 25.2 However, there are a number of implementation pitfalls that can unnecessarily derail efforts to achieve seamless, cost-efficient, and end-user friendly roaming. Three issues that the Commission should address in its implementation of the roaming service are:
- Hand-over
 - Exclusion zones
 - Non-discrimination
- 25.3 The access seeker must be able to request the seamless hand-over of calls when its customers move to or from roaming on the access provider's network. Failure to ensure access seeker's have an option to implement seamless, efficient hand-over can lead to dropped calls and lack of coverage (resulting from time delays in registration of the end-users hand-set on the access provider's network). Massive customer dissatisfaction arises from the need to manually re-register the phone. Poor implementation of hand-over, which can arise at the access provider level by refusing to fully support a complete, efficient hand-over process, would

³² Commission's MTR Reconsideration Report; para. 331.

seriously impact the end-user experience, de-value the roaming service, and may constitute a substantial threat to the new entrant's ability to compete.³³

25.4 Exclusion zones promote more efficient use of the access provider's and access seeker's networks, and is the most effective means for phasing out the roaming service as the new facilities-based competitor rolls out its network. A new entrant can maximise utilization of its own network by ensuring that any of its end-users within its coverage area are capable of receiving service only from the new entrant's network. Similarly, where end-users are roaming in high traffic areas, the access provider will prefer to hand-off the access seeker's subscribers to the access seeker's network in order to minimise network congestion.

25.5 Finally, the service to roaming end-users must be provided on a non-discriminatory basis; the access provider cannot be permitted to preferentially provide service to its own end-users in congested areas.

25.6 The designated service must clearly identify these elements as required components of the roaming service.

26. Are there any technical issues associated with data roaming which the Commission should be aware of? [4.1(k)]

26.1 All of the issues described in para. 25 regarding voice roaming are important and relevant to data roaming as well.

27. Should inter-network roaming (roaming between different technology types) be considered? [4.1(l)]

27.1 Roaming beyond cellular mobile is unlikely to be available on a commercially or technically competitive basis within the next 2- to 3-years.³⁴ (See para. 30 for an overview of the technical and cost issues.) Inter-network roaming could more usefully be reviewed by the Commission when technically and commercially feasible, though it is likely that the implementation of same-technology roaming will obviate the need for inter-network roaming regulation. To do so now is premature and raises complex technical, commercial, and regulatory issues.

28. Is inter-network roaming feasible within the time period usually used to assess new entry (2–3 years)? If so on what types of networks should the service cover? [4.1(m)]

28.1 No. See preceding paragraph.

29. If inter-network roaming is considered, does this affect the markets already defined? If so how? [4.1(n)]

29.1 No. Inter-network roaming, whether arising from direct competition or government intervention, will not change the definition of the roaming marketplace as set forth in the Commission's October Report. The wholesale market definitions are focussed on GSM and CDMA respectively, for the reasons identified by both the ACCC and the Commission.³⁵ Additional markets would have to be considered to supplement the existing GSM and CDMA markets.

Inter-network roaming will slow down competition in New Zealand and not produce a sustainable consumer outcome.

³³ Vodafone Australia suffers from this problem in its roaming agreements with Telstra. Roaming must be activated by the customer, and the customer will drop call moving from Vodafone to Telstra's network. This places a heavy strain on the end-user experience, and threatens competition. See http://www.vodafone.com.au/rep/coverage/national_roaming.jsp?gs=foryou&hd=coverage&st=australian&ss=national_roaming.

³⁴ As confirmed in the October Report.

³⁵ See the ACCC Review of Mobile Domestic Inter-Carrier Roaming Service and in the Commission's Report on Extension of Regulated Services.

30. What are the technical issues that need to be considered for inter-network roaming? [4.1(o)]

- 30.1 The main technical issues arise around implementing seamless hand-over between the two network types. Generally, new technologies are not designed to be compatible with other technologies, and therefore implementation, particularly on the 'air-interface' nearest the customer, requires major modification to the networks involved.
- 30.2 Technical implementation issues would arise both at a network level, which must be customised to overcome the technical issues, and at the handset level, which can currently only be readily addressed by large-scale operators with substantial market share and the ability to dictate the handset solutions to the manufacturers. There is no "off-the-shelf" solution to implement inter-network roaming.
- 30.3 We do not expect inter-network roaming to be practicable until global demand and co-operation between global standards bodies have eased the process of implementing and effectuating inter-network roaming. This is outside the Commission's usual 2-3 year window of review.

31. What is the most appropriate pricing methodology for access to roaming services – retail-minus or cost-based? [4.2(a)]

TSLRIC pricing promotes investment and competition among incumbents, new entrants, and consumers.

- 31.1 Cost-based. Cost-based pricing provides investment incentives to both new entrants and incumbents, while simultaneously promoting productive, allocative, and dynamic efficiency of their resources. In addition, cost-based pricing limits the ability of incumbents to exploit prices. The most appropriate cost-based approach is TSLRIC.
- 31.2 In Appendix 1, EWNZ demonstrates why cost-based pricing is preferable to a retail-minus approach. In particular, EWNZ considers that the Commission should pursue a best-practice model that allows some flexibility in pricing during and after the determination phase.
- 31.3 Pricing must be set on a cost-basis to offset market entry barriers created by the incumbent's ability to price on-net calls at cost:³⁶

Low on-net charges may give mobile operators with a high subscriber base a potential competitive advantage over smaller networks when attracting or retaining customers. Such practice may constitute a barrier to entry for new entrants or indirect access operators. These potential competitors will have to compete at the retail level and thus will have to compete with low on-net retail prices. Where the wholesale charges incurred by competing operators are greater than the effective on-net retail price in the market, this may result in a price/margin squeeze on potential and existing competitors.

- 31.4 The ACCC recognised that there are two types of roaming calls:
- 31.4.1 Originating on the roamed network (which we have labelled "MO(R)": Mobile Origination (Roaming))
- 31.4.2 Terminating ("MT(R)": Mobile Termination (Roaming))
- 31.5 As the ACCC has noted:³⁷

Mobile domestic inter-carrier roaming is a service which enables mobile subscribers to use their mobile phones to make and receive calls by

³⁶ Consultation on Remedies – Wholesale Voice Call Termination on Individual Mobile Networks, ComReg, 8 June 2004, at par, 3.12.

³⁷ ACCC Review of Mobile Domestic Inter-Carrier Roaming Service, para. 3.2.

means of another network in Australia (the 'visited' network) when outside the coverage area of the network to which they subscribe (the 'home' network). ...

When calls are made using the visited network, the visited network operator is usually responsible for organising both origination and termination of the call. Thus, the visited network operator supplies the home network operator with an end-to-end call service. ...

When calls are received using the visited network, it is the visited network which is responsible for organising termination. Thus, the visited network operator supplies a termination service.

[emphasis added]

- 31.6 In Appendix 6 (Network Elements) we have described in more detail how each of the services function. For both MO(R) and MT(R), there are close parallels with the network elements involved in termination and origination of traffic other than in a roaming context. While they are not the same, mobile termination rates therefore provide a proxy or benchmark for a cost-based assessment of roaming rates.
- 31.7 Retail-minus would not be appropriate.
- 31.7.1 Retail-minus pricing is difficult to implement in the context of the current New Zealand marketplace, especially using the New Zealand model of imputed retail price minus avoided/avoidable costs;
- 31.7.2 International uptake of retail-minus pricing has been limited, and even where this occurs the models are typically more complex than New Zealand's (for example they can be designed to *avoid* price squeeze when the basic retail-minus can *cause* price squeeze.³⁸).
- 31.8 Many of these difficulties are identified at pages 24 to 26 of Schedule 1 in the Commission's Submissions to the Select Committee. They include, as identified by the Commission:
- 31.8.1 Difficulties in imputing the retail price;
- 31.8.2 The retail-minus model does not prevent price squeeze and can in fact cause a price squeeze. By way of example, Vodafone's draft undertaking proposes a roaming charge on each SMS leg of 9 cents (i.e.; 18 cents for both legs). Vodafone offers to its own customers 2000 SMS messages for \$10 a month – or .5 cents a message. That approach, or even a much lower price per message, would allow price squeeze attacks on new entrants. Incumbents well know that litigation pursued under the Commerce Act would be expensive, complex, uncertain, and protracted; by the time the court decides the issue, it's too late.
- 31.8.3 Difficulties in determining the "minus" component. Due to factors such as high SAC, the discount would bear no resemblance to the wholesale discount of 16%, determined in Determination 497. The Commission identifies the same problem in relation to broadband.
- 31.9 Of particular significance is the decision of the UK Competition Appeal Tribunal, in October and December 2006, in *Albion v Dwr Cymru*.³⁹ This is the first major appellate decision on retail-minus pricing other than the Privy Council decisions in *Telecom v Clear* and *Carter Holt Harvey v Commerce Commission*. The Tribunal was heavily critical of many aspects of the retail-minus model. The decision is

³⁸ See for example, the changed position in Ireland in relation to retail minus, described at Para 34 of Schedule 1 of the Commission's Submissions to the Select Committee.

³⁹ [2006] CAT 36 and [2006] CAT 23.

Retail-minus is an unacceptable pricing methodology for this market; competition needs to be accelerated.

summarised in more detail in 3 articles⁴⁰: *Retail-Minus Pricing (aka ECPR) panned by UK's Competition Appeal Tribunal*; *Margin (Price) Squeeze: a landmark December 2006 UK Judgment*; and *Problems for NZ's UBS Pricing Apparent from New UK Judgment*.

31.10 Summarising key conclusions of the Tribunal:

31.10.1 This retail minus pricing model does not work in isolation where the incumbent has substantial market power. It is only a partial solution. To make it work, essential also is regulation of the retail price itself. In New Zealand mobile retail prices are not regulated. Thus the model cannot succeed.

31.10.2 Even if the retail price is regulated, the Tribunal doubted that it would succeed in engendering competition and achieving the relatively limited positive outcomes put forward by the model's proponents. Often only a "super efficient" competitor could succeed (a merely "efficient" competitor could not). Thus the retail minus model often has the effect of shutting out real competition.

31.10.3 This model is a controversial methodology, which has been criticised for having adverse effects on competition.

31.10.4 The retail minus model does not necessarily avoid price squeeze (in fact it can inherently cause price squeeze).

31.11 A more thorough review of retail-minus pricing issues is contained in Appendix 1.

32. If retail-minus, what would the various components of such a price look like (for example, what would be the appropriate retail price(s), would it be necessary to impute a retail price, what would be the avoided costs? [4.2(b)]

32.1 A detailed overview of retail-minus is provided in Appendix 1.

32.2 The Commission itself, in its submissions to the Select Committee in respect of the Telecommunications Amendment Bill 2006, identified the difficulties with retail-minus. It also identified the problems with the formulaic approach currently used in the Schedule to the Act for wholesale services, UBS, *et al* (that is, imputation of retail price less avoided/avoidable costs).⁴¹ If retail minus is adopted, it needs strong safeguards, such as regulated end-user pricing caps or a tariff approval process. As the Commission has noted, there is considerable argument in favour of a more flexible approach being available to the Commission, rather than the prescriptive approach typical of the New Zealand service descriptions so far.⁴²

33. Should a single retail-minus price cover both voice and data? How should the retail-minus price be constructed to cover both voice and data? [4.2(c)]

33.1 Yes, it should. As noted in para. 38, below, a single price can be determined across a number of services by calculating the cost based on a comparison of revenues earned for those services.

TSLRIC promotes productive, allocative, and dynamic efficiency.

34. If cost oriented pricing is the preferred pricing principle, is TSLRIC pricing the only viable option? [4.2(d)]

34.1 No. See 4.2(a) above and Appendix 1. A flexible cost-based approach would be more appropriate.

⁴⁰ The 3 articles are at www.wigleylaw.com/; see the Bibliography in the Appendix.

⁴¹ *Commission's Select Committee submissions.*

⁴² *Commission's Select Committee submissions.*

35. Would cost-based mobile termination rates be an appropriate benchmark for a cost-based roaming service? [4.2(e)]

35.1 Yes, given the similar network elements used in each. The services are not identical and so the roaming price should be benchmarked or proxied from the mobile termination rates. The Commission should use other studies as well as commercial rates as a guide to benchmarking to the mobile termination rate, such as the Wik-Consult Report prepared for the ACCC. The proposals contained in Appendix 1 facilitate this approach.

36. What are the implications of each pricing principle (retail-minus and cost-based) in terms of promoting new entry? [4.2(f)]

36.1 TSLRIC or other cost based models are likely to promote new entry for the reasons noted in para. 31.1 and 31.2, and more thoroughly described in Appendix 1. EWNZ considers cost-based roaming an essential component of its ability to compete on a national basis. In addition, cost-based pricing sends a signal to potential investors and the industry that competition, and its downstream benefits, are important to the Commission. Finally, cost-based pricing limits the ability of providers with SMP to curtail the long-term benefits of competition for end-users.

36.2 Retail-minus pricing, on the other hand, is not likely to promote competition. Retail-minus pricing:

- Restricts new entrant's ability to compete on price,
- Is prone to substantial abuse by incumbents with substantial market power, and
- Is not economically efficient.

36.3 A new entrant can compete only if they can offer service to end-users at a rate less than the rate at which the incumbent sells retail services to its end-users. In the telecommunications industry, marked by high initial fixed costs but thereafter comparatively minimal operating costs. Once a new entrant adds its overhead (accounting, customer care, and billing systems, etc.) to the "wholesale" retail-minus price, there is little or no differentiation in the final retail price at which the entrant can offer end-user services. Therefore, there is no competitive pressure the new entrant can bring to bear on price, which will deter rather than promote new entry.⁴³

"Build it or lose it" provisions are more effective than pricing mechanisms for promoting infrastructure build-out and investment.

37. In what ways could access seekers and access providers be encouraged to continue to invest, if a cost-based pricing principle was used? For example, would it be appropriate to have a roaming price that rises over time? If so, what are the appropriate bounds? [4.2(g)]

37.1 We agree with the Commission that roaming prices can and should be structured to promote continuing investment in new network. For access seekers, TSLRIC pricing already incorporates incentives for further investment – it is a critical component of the TSLRIC calculation.

37.2 For the new entrant, the primary motivator for investment in additional infrastructure arises from the need to compete against the incumbent operators. A mobile operator generally has an inherent incentive to own its communications network because:

- It makes more efficient use of the spectrum owned by the access seeker;
- It creates opportunities for competing in the sale of roaming services to

⁴³ A similar situation developed last year, and is still the subject of ongoing Commission consideration, when Telecom lowered its retail rate to a level that virtually undercut the wholesale prices at which the services were made available to competitors, making it impossible for the new entrants to compete.

domestic and international end-users, and to enter into re-selling and/or MVNO arrangements;

- It has the potential for much higher profit margins;
- It creates an opportunity to compete against the access provider on coverage;
- It allows the access seeker to shift revenue its customer's are paying to support the access provider's network to its own network.

38. Should the pricing of voice roaming differ from that of data roaming? If so how? [4.2(h)]

38.1 No, provided that agreement can be reached about the conversion factors needed to convert data into equivalent voice minutes. As described below, the calculation of the retail price includes revenue from voice and data calls so the calculated retail price reflects both voice and data.

38.2 The Wik Consult Report to the ACCC broke mobile traffic into voice and other services, to derive the share of the other services as a proportion of overall costs based on use. Under their review, 94% of the mobile traffic was voice, and the remainder other services broken up as follows:

Data Service	Share, %	Conversion Factor
SMS	0.1	432 messages per voice minute
MMS	0.1	187.5 message per voice minute
GPRS	3.0	0.080357 Mbyte per voice minute
Basic Data	2.0	1 data minute per voice minute (modem at 96kbps)
HSCSDS	0.8	0.5 data minutes per voice minute

Source: Table 5-1, WIK Consult Report to ACCC (January 2007) p 106.

38.3 The Commission could use a similar formula to compute SMS and data pricing for the regulated roaming service.

39. For each likely final pricing principle, what is the appropriate interim pricing principle that would provide an appropriate estimate? [4.3(a)]

39.1 In addition to the flexible pricing approach set forth in Appendix 1, we see three possible approaches to estimating a cost-based final pricing principle through an easy-to-apply interim mechanism:

- Benchmarking to roaming rates found in foreign markets. (See 4.3(b) for a discussion of this estimating mechanism.)
- Using domestic and/or foreign mobile termination rates as a proxy for the final roaming rate. (See 4.3(c) and (d) for a discussion of this approach.)
- Using Short Run Marginal Costs (or SRMC "plus") as an estimate of the final rate. (See 4.3(e), below, for further discussion of this substitute.)

39.2 There are risks and benefits associated with each of these interim pricing mechanisms. However, of these the mobile termination rate proxy would appear to be best suited for determining an interim price.

39.3 EWNZ considers that the roaming initial pricing would be calculated from (but not be the same as) mobile termination rate benchmarking and proxies. For the MTR cost-benefit analysis, the Commission used an indicative figure of 15 cpm (compare ACCC's suggested initial price of 12 Australian cpm). This month, the

WIK-Consult Report to ACCC has concluded the mobile termination rate (calculated on a TSLRIC+ basis, the same basis that is proposed by EWNZ for roaming here) should be nearer 5 Australian cpm.

40. Is benchmarking appropriate and practical? [4.3(b)]

- 40.1 Benchmarking to foreign roaming rates is likely to lead to an inaccurate result. While all OECD markets provide competitive guarantees to ensure the availability of roaming, the roaming rates may vary depending on whether full competition for end-user services exists, where all competitors have access to 900 MHz, or where a regulated-roaming solution is taken out of context of the wider regulatory environment and competition guarantees.
- 40.2 In addition, historical information on roaming rates and solutions is particularly problematic, as the utility of roaming, and the importance of roaming rates, varies greatly depending on the penetration rate of mobile services and the size of the competitors networks. In addition, roaming information is very difficult to obtain.
- 40.3 Finally, new entrants are entering into a market of nearly 100% penetration. No new entrant has ever succeeded in such a market. Benchmarks would not take this factor into account.

41. Could cost proxies be used, and if so, which ones? [4.3(c)]

- 41.1 Termination rates (both foreign and domestic) have a direct relationship to the costs of providing roaming services, and therefore would be a strong proxy for determining an interim roaming price. In addition, mobile termination rate information is readily available, particularly as it is subject to a substantial amount of regulation.
- 41.2 Under EWNZ's proposed approach, the Commission should base its initial roaming price on the mobile termination price. See Appendix 6 for a detailed overview.

42. Is there a close relationship between roaming rates and mobile termination rates? [4.3(d)]

- 42.1 There are substantial similarities in the network components used to provide roaming and mobile termination. See Appendix 6 for a detailed overview of the relationship between mobile termination and roaming.

43. Would an estimation process be more appropriate to use in the situation where there are very few relevant benchmarks? [4.3(e)]

- 43.1 Estimates based on the Short Run Marginal Costs might be appropriate on a purely temporary basis. The benefit of SRMC is that it is closely related to TSLRIC, but is easier to calculate, and actively promotes rapid entry to the marketplace. However, SRMC is not, in itself, sufficient as a substitute without entering into an estimate of investment incentives and return on sunk costs.

44. What is an appropriate final pricing principle? [4.4(a)]

- 44.1 A flexible cost-based approach, as described above and in Appendix 1.

45. Do respondents have any views on the wording of the other parts of a service specification for roaming and whether any new parts are needed? [4.5(a)]

- 45.1 The roaming Description of Service should be amended so that 3G services (voice and data) are included (see para. 22 above). The draft Service Description, submitted to the Minister in the Mobile Termination Rate Reconsideration, provides drafting guidance as it reflects a suitable technology-neutral approach.

- 45.2 An access seeker must have unlimited right to wholesale and resale (including to MVNO's). This is such an important component of competition that the Service Description should expressly confirm that the Access Seeker can wholesale and resell.
- 45.3 To avoid doubt, the Description of Service should be amended expressly to include data within the roaming service description (see para. 22 above).
- 45.4 Condition (a) in the Service Description bars an access seeker from access to the regulated service if it already has a roaming agreement in place. This requirement is unique among the services in Schedule 1, and the principle it espouses has since been overturned with respect to all other services. As the Commission is aware, there was concern that this provision was used by larger access providers to drive unsatisfactory commercial terms with smaller access seekers. The access seekers, faced with the cost and delay of applying for a determination, took commercial terms which substantially favoured the access provider. This abuse of substantial market power underlies the Telecommunications Amendment Act 2006 deletion of §22(a). This is a significant policy change in the Act. Condition (a) does not align with the policy change in the main body of the Act, and therefore should be deleted.
- 45.5 Condition (b) (which precludes an access seeker from a determination if there is a pending or existing determination for roaming on another network) is unnecessarily restrictive. It should be deleted.
- 45.6 Condition (d) should be amended to clarify that the roll-out ultimately must cover 80% of the population. See para. 18 and 19, above.

Promoting facilities-based competition leads to long-run competition; re-sale arrangements do not.

46. What is the most appropriate description of an access seeker? [4.5(b)]

- 46.1 The current definition of an access seeker as set forth in Schedule 1 of the Act is sufficient.

47. Should there be alignment between the access seeker and access provider definitions? [4.5(c)]

- 47.1 As noted in para. 46, the definitions do not need to be changed.

48. Should the definitions be more forward-looking to cater for fixed-mobile convergence? [4.5(d)]

- 48.1 As identified in answer to questions 4.1(l) – (o), the definitions are appropriate as they are, as amended according to the preceding 3 paragraphs.

SERVICE SPECIFICATION: CO-LOCATION

49. Should co-location pricing be based on a specified formula? [4.6(a)]

49.1 Yes. The pricing formula should consist of an annualised pro rata capital payment and a pro rata share of actual operating expenses.

49.2 The annualised capital payment could be made using the Modern Equivalent Value (“MEV”) of each agreed tower type. Where the annualisation factor = $\frac{((1+r)/(1+a))^u * ((1+a)^{(t-1)}) * (r-a)}{(1-[(1+a)/(1+r)]^n)}$

Where

		Value
a	= annual change in price of asset	[] EWNZRI
r	= pretax WACC	[] EWNZRI
u	= time to build (years)	[] EWNZRI
n	= economic life of the asset (years)	[] EWNZRI
t	= year for which calculation made	[] EWNZRI

49.3 [] EWNZRI

49.4 [] EWNZRI

49.5 Compare this formula and pricing with the most recent Vodafone offer in the Vodafone Draft Undertaking.

50. Could co-location be classified into a number of generic site types/forms? [4.6(b)]

50.1 Yes. Telecom has agreed to this approach during negotiations with EWNZ. Vodafone has also indicated a willingness to the Commission to adopt this approach.⁴⁴

51. Could a cost allocation formula be used to determine the price depending on the type/form? [4.6(c)]

51.1 Yes, using the formula in para. 48, above. All that would change for each site type would be the agreed MEV and possibly the economic life of the asset.

52. How should the initial pricing principle be distinguished from the final pricing principle? [4.7(a)]

52.1 Determining the competitive co-location price is not about determining the costs to construct (or replace) the co-location site (though sometimes this is a handy benchmark where none other is available), but rather determining the cost of purchasing the service were it available within a competitive market. Therefore, as explained in more detail below, it should be very easy to approximate the price of the co-location service by looking to the price at which potential substitute sites would be made available were they available in lieu of the co-location.

52.2 Such an “average rent” interim pricing approach would be different from (in some cases less than, and in other cases more than) the specific TSLRIC price for a particular site, since this approach looks to the price that would be paid by the new entrant were there a competitive market, not expressly at the cost of providing the site. A TSLRIC approach may prove to be a more appropriate pricing principle in the long term as it ensures an equitable allocation of costs and a reasonable rate of return in order to encourage investment.

⁴⁴ See: <http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/Investigations/ContentFiles/Documents/Vodafone%20presentaion%20at%20conference.pdf>

53. What is an appropriate interim pricing principle? [4.7(b)]

- 53.1 The interim pricing principle should be based on a benchmark of the average cost of leasing or licensing a telecommunications site on third-party property, pro rated based on the access seeker and access providers use of the property.
- 53.2 The goal of TSLRIC (and other cost-based pricing approaches) is to approximate the rates that would be charged by an efficient competitor if there was a competitive market. Fortunately, the co-location market is part of the larger market for cellular transmission sites, so an approximation of the market rates is readily available. Where competition for sites exists, new entrants can choose between locating their equipment on a building rooftop, building a greenfield site, and installing their equipment on a third-party structure, such as a lamppost or electrical transmission tower. Benchmarking on the average rent paid for these sites is therefore a good starting point for calculating the rates that should be paid in a competitive market.
- 53.3 Both the access-provider and the access-seeker should share the benefits of co-location. The former benefits from new revenues that contribute to covering the fixed costs of the site.⁴⁵ The access-seeker benefits from reduced capex and shared operating costs. With equal bargaining power, the outcome should be as follows:

$$\text{Co-location Access Price} = (\text{Rent Benchmark plus shared opex}) * \text{Use}$$

- 53.4 Rent Benchmark. The costs of establishing a site and constructing a tower are relatively fixed (excepting certain greenfield sites in remote rural areas), and variations are driven largely by whether the site is located in an urban, suburban, or rural area. Based on our internal budgets and experience, we expect to pay approximately [] EWNZRI on average for urban leases, and approximately [] EWNZRI for rural leases. We understand that this is consistent with the average rent paid by existing mobile operators. The Commission could readily benchmark this average price by quick review of the average rent paid by Telecom and Vodafone for their telecommunications sites.
- 53.5 Use. This is the pro rata share of the access seeker's use of the mast. For example, if the access seeker installs three antennas while the access provider has six, the access seeker's use of the mast would be 33%. This multiplier would reduce the price of the Co-location Access Price accordingly.
- 53.6 This initial pricing formula provides a cost-based measure of access taking into account shared use.

54. What is an appropriate final pricing principle? [4.7(c)]

- 54.1 As a potential facilities-based competitor, EWNZ needs to be able to compete at the network level. However, Econet cannot do so without access to the same resources – 900 MHz spectrum – made available to the existing operators.
- 54.2 TSLRIC would be the appropriate final pricing principle. TSLRIC provides for economic incentives to invest in future capacity, a reasonable return on the access provider's existing investments, and covers the costs of providing the service to the access seeker.

⁴⁵ Under the *Vodafone Draft Undertaking*, power would be the only non-shared operating cost.

55. Other matters

EWNZ needs the same natural resource as the incumbents in order to effectively compete on infrastructure build.

55.1 900 MHz Licensing:

- 55.1.1 The lack of international uptake of CDMA means that roaming on the Telecom network (and using the 850 MHz spectrum managed by Telecom) is not a viable option for EWNZ or, probably, for other potential new entrants. So, obtaining roaming and spectrum from Vodafone (which of course is the sole GSM provider and has the entire 900 MHz spectrum) is the only realistic choice for new entrants. Vodafone has control, in an area in which it has a monopoly. The Commission has defined the market as “the national wholesale market for roaming services on GSM cellular mobile networks”.
- 55.1.2 Vodafone owns all of the 900 MHz spectrum. An overview of the problems posed by Vodafone’s monopoly of the 900 MHz spectrum is enclosed in Appendix 5.
- 55.1.3 EWNZ has raised the issue of the 900 MHz market entry barrier in separate submissions to the MED for post-2011 re-allocation,⁴⁶ but re-allocation on expiry effectively delays facilities-based competition until at least the initial expiry in 2011. A commercial agreement for access to the 900 MHz spectrum at wholesale rates and on reasonable terms can only be expected to arise through regulatory pressure. The most effective means of providing access to this critical spectrum in the interim is therefore an investigation into 900 MHz licensing.
- 55.1.4 EWNZ has previously submitted a proposed description of a 900 MHz licensing service. We would request the Commission review the 900 MHz licensing proposal and move to designate 900 MHz licensing as an essential component of this investigation.

SMPs have an array of tools to deny or limit access; pro-active regulation and monitoring are necessary to protect competition.

55.2 Pocket Pricing, On-net pricing and other Anti-competitive Measures:

- 55.2.1 The mobile industry is multi-dimensional. Focusing on co-location and roaming in isolation will not prove a sufficient barrier to abuse of significant market power. The Commission must show pro-active vigilance against anti-competitive measures, that arsenal of pricing tools available to an SMP to deter competition; re-active reliance on the Commerce Act will be insufficient.
- 55.2.2 In the October Review, the Commission concludes that it has the ability to deal with these issues under the Commerce Act. While there may be theoretical remedies, the reality is very different. Commerce Act violations are notoriously difficult to prosecute, both for the government, and even more so for the small new entrant. An incumbent can push the limits on pocket pricing, on-net pricing and price squeeze, for example, with little real fear of problems under the Commerce Act. It is unrealistic for the Commission to conclude it has real ability to deal with such issues when history shows how difficult this is (indeed, such issues are endemic in the telecommunications sector internationally).
- 55.2.3 It can therefore be expected that incumbents will engage in actions which may be anti-competitive, for which there is little practical redress. This is a major dynamic, and a factor that the Commission should take into account when assessing the price and non-price terms.
- 55.2.4 If an incumbent engages in anti-competitive behaviour in breach of, for example, §36 of the Commerce Act, it would take several years for the matter to come to trial, assuming a decision is made to litigate such

⁴⁶ See Appendix 5.

expensive, protracted and notoriously complex litigation. The Commission itself has made this point.⁴⁷ This is exemplified by the time it is taking for the Commission's investigations into bundling and ADSL services (the investigation commenced in late 2004, and there is little public sign of progress).

- 55.2.5 Illustrative also is the rarity of Commerce Act actions in relation to telecommunications and the time they take from alleged breach to trial (for example, the data tail litigation). Additionally, applications for urgent relief are rare (whether injunctions or cease and desist orders). The Commission has obtained only one cease and desist order. There has not been an application for injunctive relief in a telecommunications competition context for some years (and the success rate of applications is low). Cost and delay make Commerce Act remedies largely ineffectual.
- 55.2.6 The Commission's current remedies are heavily subject to practical realities. It appears that incumbents recognise the inherent problems: by the time an allegation is taken to trial, it is generally too late for the new entrant, faced with anti-competitive actions, and the already difficult task of succeeding in a saturated duopoly market.
- 55.2.7 As pricing plans can change frequently, there's a distinct risk that standard Commerce Act processes will overwhelm the Commission's resources. Most OECD countries provide express mechanisms for the regulator to monitor and prevent pricing abuses. New Zealand's regulator, however, generally lacks such express powers. For example, New Zealand is the only OECD country (other than Luxembourg) without either a tariff approval or price cap regulation.⁴⁸
- 55.2.8 The Telecommunications Act, however, provides a number of mechanisms for potentially resolving disputes, and can be readily modified to be consistent with OECD best practice. Combined with the specialised knowledge of the Telecommunications Commissioner, the Telecommunications Act would prove a much more effective tool for ensuring Vodafone and Telecom's substantial market power is not abused at the end-user level.

The Commission must request prompt release of the Ministry for the Environment's consultation on telecom revisions to the RMA and industry discussions to promote rapid deployment of competitive mobile infrastructure.

55.3 Resource Management Act

- 55.3.1 The consent process under the RMA can be a significant barrier to market entry, causing substantial delays in network roll-out. At para. 92 of the October Report, the Commission notes that the delays and costs caused by the RMA process are *"a condition faced by both incumbents and new entrants, and is therefore not a barrier to entry."* This assessment is inaccurate. The incumbents already have well established networks, much of which was built prior to the existing scheme. Meanwhile, both the Government and local councils have been tightening RMA consent requirements, many of which substantially impact telecommunications facilities.
- 55.3.2 As the Commission noted in the October report, it is our understanding that the Ministry for the Environment is pending release of a consultation document for a National Environmental Standard for low impact telecommunications facilities. The Commission should request the Ministry for the Environment's prompt release of this proposal for further development and comment, with a particular emphasis on limiting potential barriers to facilities-based competition.

⁴⁷ See the Cease and Desist Guidelines.

⁴⁸ See *Telecommunications Regulatory Institutional Structures and Responsibilities*, OECD Director for Science, Technology, and Communications Policy, 11 January 2006.

55.3.3 Co-location could be best promoted through ensuring rapid approval of co-location applications under the RMA, as implemented in other jurisdictions, such as the United States and Australia. The existing RMA regime has made constructing mobile sites far more restrictive than even a few years ago, which could lead to substantial delays in roll-out.

55.4 Accounting Separation

55.4.1 Ensuring wholesale access to services on non-discriminatory terms can only truly be achieved by some form of accounting separation, as the Commission will have to conduct extensive accounting review in order to establish TSLRIC costs. Accounting separation is particularly helpful for preventing routine accounting abuses. Beginning the process of accounting separation now would expedite resolution of price and non-price terms when and if there is an application for determination or a standard terms determination.

55.4.2 For further reference on the growing requirements of separation, see *Report on Experiences on the Implementation of the Recommendation Concerning Structural Separation in Regulated Industries*, OECD, 2006.

56. Conclusions

56.1 The Commission has undertaken to create competition in a market approaching 100% penetration, a feat never before pursued by a mobile communications regulator. In order for a new entrant to effectively compete in such a market, the Commission must ensure access to essential services at competitive, cost-based prices. Any other pricing will make it impossible for a new entrant to have a substantial impact on downstream end-user prices or services.

56.2 The Commission's objective must not be about simply levelling the playing field, as that would only allow limited new entry, and would be insufficient to ensure the new entrant can provide downstream long-term benefits to end-users. Instead, the Commission must actively promote competitive efficiencies to ensure there is a basis on which new entrants can commence bringing competitive pricing and services to the market. The gross inequities created by the incumbents' SMP require the Commission to be pro-active and vigilant on a range of fronts, or risk a new entrant being quarantined by any of the variety of anti-competitive measures available to the incumbents.

56.3 It would appear to be an insurmountable task, fraught with numerable threats, many identified in the October Report, including

- Roaming access
- Co-location availability
- 900 MHz spectrum access
- RMA restraints

56.4 Other threats have not been expressly identified, particularly those at the retail level, but lie in wait as the usual tools of a threatened SMP:

- Pocket-pricing
- Closed-network pricing
- Long-term end-user contract lock-ins

56.5 This investigation is a major step toward removing these barriers to entry. We look forward to working with the Commission to resolve these barriers over the next few months, and to seek means to pre-empt or address the remaining

market entry threats and barriers, thereby bringing true, long-term benefits to end-users of mobile services.