

**VODAFONE NEW ZEALAND LIMITED
SUBMISSION TO THE COMMERCE
COMMISSION**



**Schedule 3 investigation into amending the roaming
and co-location services**

Draft report

31 August 2007

PUBLIC VERSION

I Summary

1. This is Vodafone's submission on the Commission's Draft Report into whether to amend the roaming and co-location services or to accept our Undertaking.
2. The Commission is going too far in its Draft Report.
3. We suggest that the Commission either recommend that the Minister accept the revised Undertaking, or scale back its regulatory proposal to:
 - Cover only 2G technology (except where 3G is not available) – Regulation of newer 3G networks, including networks that have not even been started yet, creates unnecessary confusion and uncertainty, and affects firms' incentives to enter the market and build their networks.
 - De-average prices to reflect cost differences between geographic areas but do not set roaming prices too low – Forcing down roaming prices as far as you can towards cost will deter firms from building infrastructure, since it could well be cheaper to use someone else's network at regulated prices and to argue constantly for lower rates from the Commission, especially outside the cities.
 - Focus on providing assistance to new mobile entrants who are building networks – Requiring Vodafone to provide roaming to Telecom at prices set by the Commission (and vice versa) is mischievous and pointless. Neither firm needs regulated roaming to build out their mobile networks.

This regulatory proposal is far too wide-ranging

4. To explain why the Commission's proposal goes too far, consider a simple analogy.
5. Let us say that Vodafone's mobile network is a hotel. It is not finished yet, in fact, it is never really finished because we are continually adding more rooms and improving the décor as new design technology allows.
6. The government's objective is to encourage the building of more hotels. And so the government has said since 2001 that we must offer rooms to a new entrant so it can provide services while it builds its own hotel. We are comfortable with this – we have offered rooms to TelstraClear and NZ Communications. We have provided an Undertaking that sets the terms on which we would offer rooms to anyone.

7. The Commission is now saying that it wants to set the room rate itself. This is unnecessary since rental arrangements have already been agreed and appear to work fine without government involvement.
8. The Commission is also saying that we must give our tenant access to all the facilities of our hotel, including the newest parts. As we add more rooms or better facilities, we must offer those to our tenant for the same rate. This seems highly unreasonable. First it will reduce our incentives to improve our hotel for the benefit of our guests, and second the tenant will lose the incentive to build its own place.
9. But it gets worse. The Commission is also saying that if the tenant requires some modification to our hotel to cater for its needs (new balconies, better views, garage-parking for its cars) then we will be required to pay for those alterations, and we can not raise the room rate. This is the impact of forcing us to pay the setup costs to accommodate a roamer on our network, and it strikes us as misconceived.
10. Even more concerning, the Commission is saying that the tenant never needs to finish building more than 10% of its hotel (there is no requirement to build beyond 10% population coverage). And we have to offer rooms on regulated terms even to someone who already has a hotel next door that is four times bigger than ours (the Commission is proposing that Telecom can roam on our network at prices set by the Commission).
11. Given the joys of regulated room rates and excellent services, it would be hardly surprising if our tenant never finishes building its own hotel, and never moves out of ours. Indeed any tenant is more likely to abandon plans to build and spend its time trying to convince the regulator to lower the rent.
12. Perhaps worst of all, the Commission is saying that anyone who builds a network will have to offer access to any other network builder at a regulated rent (except for big network operators, but even they can roam outside the cities). We fear this will cause massive confusion, with everyone wanting everyone else to build a house so they can snaffle a room at a cheap rate.
13. All in all we think this regulatory proposal is a recipe for disaster.
14. The Commission typically takes comfort from knowing that its approach has been tried in other countries. In this case there is no such comfort to be had. As far as we know this is the most aggressive roaming regulation of any country in the world.
 - We are not aware of any regulator that regulates roaming on 3G networks or networks that are yet to be built, let alone at the regulator's assessment of cost-based prices.

- Nor are we aware of any country where the regulator requires access to roaming for firms that already have nationwide mobile networks. This undermines the whole point of roaming regulation, which is to assist firms as they build out their networks. Firms that already have nationwide networks do not need this assistance.

Regulation as proposed will undermine investment

15. The fundamental issue here is whether regulation of roaming will generate better long-term outcomes for end-users than Vodafone's Undertaking. To us this leads automatically to the question of whether regulation can be expected to lead to new mobile entry or more extensive mobile infrastructure building.
16. The Commission is of the view that by regulating the price of roaming to cost it can encourage a new entrant to enter the mobile market, and that it can do this without negatively affecting the incentives of Telecom, Vodafone or other entrants to build out their networks.
17. The impacts on investment incentives are both the justification for and the key impact of this regulation. We expected some careful dissection of the issue. But the Commission devotes just six paragraphs that we can see (out of its 565 paragraph draft report) to the question of investment impacts from this proposal. And those six paragraphs simply assert that nothing bad will happen.
18. As a consequence of the proposals in the Draft Report we have stopped building new 3G coverage sites beyond our existing commitments until the outcome of this investigation is clear. This is because regulation as currently proposed will have a serious negative impact on the business case for our planned network build.
19. The Commission needs to reconsider its stance towards infrastructure investment. Vodafone is required to continually contribute more money to Telecom under the TSO, and there is the prospect of a step change in liability in order to pay for Telecom to provide broadband. In this environment, it is hard to believe that the Commission thinks that forcing us to provide roaming to Telecom at a price set by the Commission will have no impact on our incentives to invest in our network.

The Undertaking remains the best way to proceed

20. Roaming regulation is designed assist new mobile network builders by giving them certain and reasonable terms for roaming. This is the initial problem that led to the Commission's investigation.
21. The Undertaking provides a far superior way to deliver certainty to new entrants if the Commission is minded to regulate. A revised version of the Undertaking is included with this submission. In our view it delivers

the required certain and reasonable terms for new mobile network builders, but it avoids many of the costs and risks associated with designating roaming.

22. In particular, it avoids the need to spend more years arguing about the details of roaming regulation. In our view the Commission is substantially underestimating the costs, risks and delays associated with designating roaming and establishing final price terms.
23. As an example of these costs and delays, we are right now attempting to finalise roaming arrangements with NZ Communications so that they can enter the mobile market from mid 2008. Sustained uncertainty on the terms on which the Commission will regulate roaming will make it difficult to reach agreement, given the significant impact that the Commission's investigation could have on commercial terms.

The Commission needs to think again

24. The Commission can do much better than its current Draft Report in its analysis of the issues. We suggest that it:
 - Focuses attention narrowly on solving the nationwide coverage problem for new mobile entrants,
 - Chooses the least intrusive, quickest and most certain regulation that it can to achieve its objectives,
 - Considers carefully and thoroughly the impacts on investment decisions by operators and potential operators from this regulation, and
 - Makes a realistic assessment of what difference the proposed regulation will actually make in the real world.
25. We welcome the Commission's indication that there will be a conference on this Draft Report. There are many important issues to discuss, and we appreciate the chance to put our views directly.
26. In our view the Commission's best option is to recommend that the Minister accept the Undertaking. This is the quickest, easiest and cheapest way to deliver certainty on reasonable roaming terms to new mobile sector entrants.

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III Introduction

27. Vodafone's submission on the Draft Report consists of three documents:

- This submission on the Report itself,
- A letter that explains the changes we have made to the Undertaking and gives our responses to the Commission's views, and
- The revised Undertaking itself.

28. Covec has also submitted a short report on some of the economic aspects of the Draft Report.

29. This document is structured as follows:

- Section IV outlines the five most important issues. The Commission needs to focus its attention on the core regulatory problem, and avoid extensive meddling in more peripheral issues. We also think the Commission should be more cautious on the impacts of regulation on investment incentives, on the pricing of roaming, on regulating new technologies, and on who can access this regulation on what terms.
- Section IV covers some questions around the decision-making framework that underlies the Commission's draft report. We fear that the Commission is unreasonably extending the ambit of this regulation and taking a looser approach than normal in proving the case for regulation.
- In Section VI we explain why we still consider that the Commission's market definitions are too narrow. Both common sense and the SSNIP test should lead the Commission to geographically segmented roaming markets split into areas where building is economically viable and areas where it is not. NZ Communications is telling you clearly where building is viable with their rollout plan.
- Section VII looks at competitive conditions in the markets defined. In our view the Commission is downplaying the competitiveness of all the relevant markets, which may support regulation but does not reflect reality.
- Section VIII looks at the impact of regulating roaming prices, and Section IX does the same in respect of co-location prices. The challenges here are in selecting an appropriate counterfactual and ensuring the modelling is realistic.

- In Section X we provide an alternative service specification that reflects our comments, and Section XII answers the Commission's specific questions.
30. In line with usual practice and the Commission's confidential information Deed, all confidential information in this submission is labelled and enclosed in square brackets.

IV Five fundamental issues

31. In this section we discuss five issues that go to the heart of the Commission's proposals. The issues are:

- How the Commission should go about its investigation – The Commission should state very precisely the problem that it is trying to resolve, and relate every part of the solution to how well it solves that problem. The Commission is extending regulation too far at this point because it does not have a clear statement of the problem it is trying to solve. We also think the Commission should consider carefully the costs and risks of regulation, and commit explicitly to choosing the least cost, faster and most certain regulatory means it has available that will solve the problem.
- How roaming prices affect investment incentives – The whole point of this regulation is to change investment incentives. More investment in mobile networks means more competition and therefore greater benefits for end-users. Rather than skirting this issue, the Commission must clearly state that it wants to increase incentives for infrastructure investment, and then analyse the impact of regulation on the investment incentives of potential entrants and existing operators. The Commission must recognise explicitly that lower roaming prices will mean less infrastructure building.
- What pricing is appropriate for roaming services – The Commission is wrong in principle to try to regulate roaming at its assessment of a cost-based price in areas where entry is economic. This is because it undermines the basic objective of encouraging infrastructure building; if the Commission pushes roaming prices down too low, this will be a significant disincentive to investment and operators are likely to find it better to roam than to build. This will mean less mobile infrastructure gets built, and, as a consequence there will be less intense mobile competition, all other things equal, and the regulation will impact negatively on long-term benefits for end-users..
- How should the Commission deal with new technologies – The Commission can not justify the regulation of 3G or HSDPA roaming with reference to the problem that it is trying to solve of ensuring nationwide mobile coverage for new entrants. Nor can the Commission can justify regulation of networks that have not yet been built. This is a significant issue and is closely related to the disincentives for investment referred to above. We also question regulation to assist potential WiMax operators without further analysis and some evidence of a problem.

- Who should be able to access this regulation – Neither Vodafone nor Telecom needs access to regulated roaming on any part of any network. Both already have nationwide mobile coverage. We have a suggestion for how the Commission could limit access seeker to effectively exclude Vodafone and Telecom. We also think that a rollout requirement for mobile operators is a good way to reduce the risks of unintended consequences from roaming regulation.

The Commission needs to carefully consider the objectives, impacts and risks of regulation

Be clear on the objective of regulation

32. Our summary of the Commission's Draft Report is:

- Roaming is critically important so that mobile operators can offer nationwide coverage for their services as they build out their networks.
- Commercial roaming prices have been too high and this has contributed to the failure of entrants to build new mobile networks.
- This lack of new mobile networks has led to higher retail mobile prices than might otherwise have prevailed if there had been more networks built.
- Regulating roaming prices will likely generate new mobile entry, and new entry will lower mobile retail prices for consumers.
- Regulation will not have any significant negative impacts to offset these benefits.

33. From that statement of the logic of intervention it seems that the Commission's underlying objective is actually to generate the most extensive mobile network infrastructure competition that it can. This in turn will generate the strongest and most sustainable mobile market competition.
- If encouraging infrastructure investment in mobile is the objective, it would be helpful for the Commission to state this objective clearly: it is fundamental to the Commission's work.

- It would also be helpful in this regard for the Commission to restate its normal view that infrastructure competition is the best kind of competition.¹

Be clear on the problem that is to be solved

34. The Commission is proposing a very broad regulatory intervention, covering many unbuilt networks and new technologies, involving aggressive price controls, and providing assistance to a wide range of firms including genuine new entrants, those who are already in the market, and those who may enter the market at some point in the future.
35. We do not believe that such a wide-ranging intervention is required to solve the actual problem the Commission has in front of it.
36. The problem that faces the Commission is well known: how to enable new mobile entrants to offer nationwide mobile service from their launch date if they can not build nationwide coverage at launch (or perhaps ever), and if they can not secure reasonable roaming terms from Vodafone or Telecom.
37. We would encourage the Commission to focus its attention on solving just this problem, and to take the minimum possible regulatory intervention required to do so.
38. If we look at what the Commission is proposing, we can see how extreme it is. On all facets of this proposal, it is difficult to think of a way that, within the reasonableness bounds of its role, the Commission could have been more aggressive.
39. Individually the Commission argues that all of these requirements are necessary, but the overall picture is of an extreme intervention that may resolve the market failure but that will also have unpredictable and potentially far-reaching impact on the mobile sector. The consequence of this is significant for Vodafone as it requires us to reconsider the business case for our network build – an issue that the Commission has simply dismissed in its Draft Report.
40. As far as know, this is the most aggressive roaming regulation of any country in the world. We are not aware of any regulator that regulates roaming on 3G networks or networks that are yet to be built, let alone at its assessment of a cost-based price. Nor are we aware of any country where the regulator requires access for firms that already have nationwide mobile networks.

¹ The Commission does imply this in reverse, by discounting the usefulness of MVNOs in terms of driving competition (paragraphs 150 and 151), but it would be helpful to say this clearly.

41. The Commission would do better to take a position more cognisant of the risks and costs of regulation.

Table 1: Extremity of Commission's position

Issue	Least intrusive	Most intrusive	Commission choice
Form of regulation	Undertaking	Regulation	Regulation
Price regulation	No regulation of prices	Price regulation	Price regulation
Price level	Retail minus	Cost-based	Cost-based
Technologies	2G mobile only	All existing and future mobile technologies	All existing and future mobile technologies
Access seeker	Only new entrant mobile operators who have built 10% coverage	Any firm (including existing operators and non-mobile operators) that has built 10% coverage	Any firm that has built 10% coverage, although firms with more than 25% market share can not access regulated roaming in cities
Rollout	Nationwide rollout obligation	No rollout requirement	No rollout requirement

Be clear on the impacts of regulation

The Commission needs to be clearer about whether regulation will mean entry

42. We agree with the Commission that new entry in the mobile market would mean more competition and positive impacts for consumers (and we also agree that estimating the size of those impacts would be fraught with difficulty).
43. The question therefore is not whether new mobile entry would have positive effects, but whether regulation will generate that entry or whether the entry will happen anyway, i.e., without regulation.
- If a firm will enter with roaming rates as they are in the Commission's counterfactual, then the benefits from additional entry would happen even without regulation. We can not see how the Commission can argue that regulation would bring benefits in this case.²

² It may be possible to argue that regulated roaming rates would change an entrant's entry strategy in positive ways, but this would require some contentious and difficult analysis of the impact of roaming

- If the Commission's view is that a firm will not enter with roaming rates as they are in the counterfactual, then clearly its view is that roaming regulation will cause entry.

And in this case the Commission could argue that entry would not have happened anyway and that there would be benefits from price control of roaming.

44. This assessment of the impact of regulation is made more complicated because the Commission's behaviour has affected and continues to affect the market.

- If the Commission had refused to start an investigation into regulating the price of roaming in 2006, then access seekers would have had to choose between entering with current roaming prices, or not entering at all.
- Once the Commission announced a decision to investigate, though, access seekers could lobby for more aggressive regulation from the Commission to improve their business case. And they might delay entry while they seek certainty on what the Commission will do. [

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45. The Commission implicitly referred to this point in its media statement on the release of its Draft Report. This statement mentions that only New Zealand and Slovakia have just two mobile networks.³ The implication is that this lack of entry was caused by a failure to regulate roaming, but it is not obvious to us that the lack of regulation of roaming prices has been a major driver.

- We had a roaming deal with TelstraClear in 2005. The pricing in that agreement was not in dispute (indeed, it was suggested by TelstraClear) and yet TelstraClear did not enter then, or at any time in the following two years before announcing that its lack of entry was our fault.⁴

rates on competition in the retail market upon which we assume that the Commission is not keen to embark.

³ NZ Communication's submission on the Issues Paper suggests that it is in fact Slovenia rather than Slovakia that has only two mobile networks (see footnote 7 on page 1, and paragraph 13.6).

⁴ The Commission is understating the position somewhat in paragraph 253, where it says that "discussions" on roaming have been ongoing for a number of years. In fact, there has been more than just discussion: formal contracts have been agreed. In addition, the Commission suggests that only relatively high roaming rates were "offered". As we have explained, TelstraClear, not Vodafone, suggested the pricing in the 2005 agreement.

- We find it difficult to believe that regulating roaming prices in 2005 would have changed TelstraClear's entry decision, but it would be helpful for the Commission to clarify its views on this issue.
 - The other potential entrant was Econet. We do not consider that Econet's behaviour, until recently, was that of a potential investor serious about making a strong commitment to the New Zealand market.
 - As just one example (and we know the Commission itself is aware of others), the best price it would offer for roaming was a small fraction of the prices that we agreed with TelstraClear or the Commission's current estimate of the cost of roaming.
46. It is always easy to blame current operators for the lack of mobile entry, when we have done all that we were obliged to and more to assist new entrants into the market.⁵ We believe that responsibility for broken promises more naturally rests with those who have made the promises.
47. We encourage the Commission to be clear on its views about the impact of regulation and the likelihood of entry without regulation.

The Commission should think about where regulation is necessary

48. Regulation of roaming prices is not required in every geographic area. The simplest way to think about this is to divide the country into two areas:
- In areas where an entrant can economically justify building network infrastructure, then there is no reason to regulate prices. In these areas if the roaming provider were to set a high price for roaming it will simply encourage faster building. The only exception is if the price is so high that it deters an entrant from entering entirely. There is no evidence that pre-regulation prices for roaming were nearly high enough to deter entry entirely.
 - It is only in areas where an entrant can not economically afford to build that roaming price regulation can help. High roaming prices in these areas would never be able to be avoided by an entrant by building a more extensive network (since network building is, by definition, uneconomic in those areas).
49. We encourage the Commission to think carefully about the impact of roaming regulation in areas where building is viable as well as areas where it is not in its Final Report. We do not think the Commission can

⁵ Going further back in time, Telstra had 900 MHz spectrum suitable for building a GSM network in 1993. It chose to sell its spectrum rather than to build a network at a time when the market was not even 10% penetrated.

justify nationwide price regulation of roaming on the evidence before it (although we continue to be happy to offer roaming in all areas outside the 10% initial build area under the terms of our Undertaking).

- It seems to us that NZ Communications is clearly indicating which areas it thinks are economically viable to build by disclosing its plans. It has said it plans an initial launch to about 60% of the population, and building to 80% coverage over time.⁶

50. We come back to this issue below when discussing market definition.

Be clear on the risks of regulation

51. As well as being clear about objectives and impacts, the Commission should be more upfront about the risks of regulation.

52. It would be helpful for the Commission to state clearly that the impacts of regulation are uncertain and can be negative, and that therefore it will choose the least intrusive intervention that will achieve its objectives.

- We fear that the Commission has overstepped this basic principle of regulatory practice with the proposals in its report. The Commission is at risk of regulating roaming too intrusively, without recognising that doing so could have unpredictable and potentially negative effects.
- At least we would expect the Commission to recognise somewhere in its report that there are some costs to regulation and to indicate what those costs are. This has been a standard part of the Commission's analysis in the past, but it is less clear in this Draft Report that the Commission thinks there are any costs at all from regulation in general or this regulation in particular.

53. We find this lack of recognition of costs and risks surprising. This is the only time, as far as we are aware, that the Commission has proposed to regulate the prices of services delivered over assets that can be economically replicated.⁷

54. Given the novelty and risks of regulation in such a dynamic area as mobile, we find the Commission's enthusiasm for regulation remarkable.

- The Commission is proposing to regulate roaming on our existing 2G, 3G and HSDPA networks.

⁶ <http://m-net.net.nz/theline/3666/regulation/co-location/new-zealand-communications-plays-green-card-to-fast-track-mobile-p.php>

⁷ With the arguable exception of mobile termination, where we would argue that assets can be replicated and the Commission would argue that each operator has an unassailable monopoly for termination on its network.

- The Commission is proposing to regulate roaming on Telecom's existing CDMA and EVDO networks.
 - The Commission is also proposing to regulate roaming on unbuilt networks. This includes the GSM and W-CDMA networks of Telecom and NZ Communications, any new cellular mobile networks, and any extensions to any existing cellular mobile network that any operator might make in the five years following regulation.
 - Potential access seekers for this service include any firm at all that has built 100 sites or covers 10% of the population, including Vodafone, Telecom, NZ Communications, or even firms that are not building cellular mobile networks, like WiMax or WiFi operators.
55. The Commission characterises this as "technology neutral" regulation. This moniker seems like a thin cloak to dress up proposals that carry serious risks of deterring investment in mobile networks. We see this report as a new low in regulatory overreach.

Regulating roaming prices will change investment incentives

The point of regulating is to change incentives

56. The point of regulating roaming prices is to change incentives to build mobile networks.
- The objective of this proposed regulation is to increase the incentives of new entrants to build networks by lowering their roaming costs. If regulation does not encourage entry into the mobile market there is little point in regulating.
 - The Commission wants to avoid discouraging existing mobile firms from reducing their level of investment in their networks.
57. The Commission should not shirk from making it clear that influencing investment incentives is the overriding objective. Encouraging more mobile investment will promote more competition for the benefit of end-users.
- It is clear from the Commission's work that it thinks that regulating roaming will increase incentives on new entrants to enter the market and build some network infrastructure. This is the focus of its extensive analysis of the entry business case using the Covec model.
 - But at present there is very little in the Commission's assessment of the impact of regulating roaming prices to suggest that Commission thinks regulation will have any negative impacts on incentives to build mobile networks.

- Given the absolute centrality of this issue to the Commission's case for regulation, it is surprising how little analysis there is.⁸

There are negative impacts on investment that the Commission does not consider

58. We see two possible negative impacts on investment incentives from regulating roaming prices:

- Regulating roaming rates will reduce an entrant's incentives to build its network out – As the Commission recognises, a roaming operator will consider the costs of building, the revenues available from building, and the costs of roaming in a decision about whether to build coverage in a new area. So if the Commission regulates roaming rates lower (as proposed) then an entrant will build a less extensive network than it would if roaming prices were higher. Less infrastructure building means less intense mobile competition and this means worse outcomes for end-users. This is a critical issue that is not considered at all in the report.
- The roaming rate also affects incentives to build for all mobile operators. If the Commission sets roaming rates too low then the firms' incentives to maintain and build out their network will be reduced. This is because the returns from covering an area will fall. The Commission has not considered this issue in its report either.

The lack of consideration is particularly egregious in this case because the Commission is proposing regulation of so many networks that are yet to be built, and so many technologies that are yet to be rolled out or commercially proven, and yet it does not recognise any costs or risks from that regulation.

The overall impact of roaming regulation must be assessed

59. So we see three impacts on investment from roaming regulation:

- A possible increase in the incentives of an entrant to enter the mobile market,
- A possible reduction in the incentives of an entrant to build out its mobile network, and
- A possible reduction in the incentives of regulated firms to build out their mobile networks.

⁸ We count just six paragraphs in which the Commission specifically considers the issue of the impact of this proposed regulation on network investment: paragraph 303, and then 479 to 483. It also refers to the risk in paragraph 506.

60. The overall impact of these effects is hard to judge. The Commission needs to at least attempt an assessment if its decision in this case is to meet even basic standards of reasonableness.
61. Our assessment of these three effects is as follows.

Roaming regulation may make some but not much difference to the entrant's incentives to enter

62. As we have said above, we are not convinced that regulation of roaming prices will generate new mobile entry.
63. We agree that lower roaming rates improve the entrant's business case for entry (although not for a more extensive build), but there is a question about how strong this effect is.
- When compared with the Undertaking or with the terms that are now available commercially available, regulation will not make much difference to an entrant.
 - The Commission calculates big impacts on the entrant's viability from reductions in roaming prices, but this is because it chooses high roaming rates to compare regulation with, when in reality we are offering much lower rates.
 - And the Commission has not considered whether there will be new entry without price regulation of roaming.

Roaming regulation will make a difference to the entrant's incentives to build out

64. We expect there would be an impact on the entrant's plans to build out if roaming rates are set at cost. This is because it will be cheaper in many areas for an entrant to roam than to build. The overall effect could be to substantially reduce an entrant's incentives to roll out a network.
65. The only evidence on this point before the Commission is the Covec model. The Commission can use the model to generate an estimate of the impact of different roaming rates on the entrant's buildout.

Roaming regulation could also negatively affect incentives on all parties to build networks

66. Roaming regulation could also reduce incentives on all mobile operators to build out their networks since they know they will have to offer access to those networks on terms set by the Commission.
67. Given the uncertainties about future networks and what regulated prices might turn out to be, it seems especially risky for the Commission

to propose extending regulation to new technologies (like 3G and HSDPA) and to unbuilt networks.

- Particularly in low-traffic areas, this regulation could lead to a standoff where no firm wants to invest because it will automatically have to offer roaming to all the other mobile operators at rates set by the Commission and based on cost.
 - Regulation will also mean ongoing uncertainty on what roaming rates will actually be. This uncertainty and delay will affect the ability of firms to come to reasonable commercial arrangements in the meantime.
68. The Commission argues that Vodafone will build regardless of regulation, because Telecom will build and we will have to compete in paragraphs 482 and 483.⁹
69. This seems a rather brief treatment of a critical issue. The question the Commission fails to ask is whether Telecom, Vodafone and any entrants will build as quickly or as extensively with roaming regulation as without roaming regulation.
70. From what it says in the Draft Report, the Commission believes that it can continue to regulate access to any mobile network, whether built or unbuilt, and that this will have no or negligible impacts on investment incentives. This is fundamentally flawed and it is not, in fact, true.
71. As a consequence of the Draft Report we have stopped building new 3G broadband coverage sites until the outcome of this investigation is clear. This is because regulation as currently proposed will have a serious negative impact on the business case for our planned network build. [

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72. The impact of this on end-users is serious.
- We expect to reach [] VNZRI population coverage with 3G broadband by March 2009. Our plans before this change called for an extension to [] VNZRI of the population by around 2012.
 - So if we do stop building new 3G broadband coverage here, 29% of the New Zealand population or around 1.2 million people will never be covered by Vodafone's 3G broadband network.

⁹ This is interesting anyway, because it seems to be putting faith in competition between Telecom and Vodafone that the Commission typically has little faith in.

73. This is a serious impact if the Commission is really concerned about promoting nationwide infrastructure competition. But we can not continue our current network rollout without knowing whether access to all of our networks will be regulated at the Commission's estimate of a cost-based price, and whether the Commission will require us to allow our biggest competitor to roam on our network.
74. There is another example of regulatory impacts on investment from Callplus's WiMax network plans.
- Before the decision to unbundle the local loop Callplus had announced a nationwide WiMax network at a cost of up to \$450 million.¹⁰
 - After the unbundling announcement there seems to have been a change in plans, with some WiMax and some LLU investment (although the precise picture is unclear). This appears to indicate less investment overall, particularly given that the costs of building an LLU network are likely to be much lower than a WiMax network.
 - Some might argue that a large-scale WiMax network would be inefficient overbuilding because there is only a need for one access network (i.e., Telecom's) and every other firm can use that at cost-based prices.

But others might argue that differentiated technologies lead to deeper and more sustainable competition, that the market is best placed to decide how many networks are sustainable, and that therefore the changing of Callplus's plans is a negative for consumers.

75. More broadly, the attitude of the Commission towards infrastructure competition is strange. In theory we think encouraging infrastructure competition is the best way to promote competition. In practice the Commission's policy settings make it extremely difficult.
- By June 2008 we expect to have contributed around \$116 million to Telecom for the TSO since 2001. The Commission continues to increase these contributions even though a recent government report shows that Telecom does not invest most of the money that we have to give them in services to rural end-users.
 - There is also the prospect under the TSO review that we will have to make additional contributions to fund broadband services provided by Telecom as part of the TSO.

¹⁰ http://www.nbr.co.nz/home/column_article.asp?id=16931&cid=3&cname=Technology

- The Commission is now indicating that we will be required to give Telecom roaming access to our mobile network at a price set by the Commission.
76. We find it hard to believe that the Commission seriously thinks that these policy settings could ever encourage us, or any other serious investor, to build mobile infrastructure.
77. But worse than that, the Commission hardly even considers these issues in its Draft Report. Whether the Commission believes that it is encouraging network building or not, it must at least consider these questions more carefully in its work.
78. One way for the Commission to consider these issues would be to inquire into and then estimate what it expects to have happen in terms of the number of networks and the extent of their coverage without and with regulation of roaming prices.

Aggressive cost-based pricing would be a mistake

Cost based pricing is not appropriate in places where entrants can economically build networks

79. The Commission has indicated that the two options for pricing roaming are either retail-minus or cost-based (TSLRIC) rates.
80. Regulated cost-based prices can be appropriate in circumstances where the infrastructure at issue is not replicable.
- In these situations, leaving money in the network part of the cost structure may be inefficient, because there is no way to build competing infrastructure. So allowing network builders a return higher than cost (appropriate adjusted for risk at the time of building) is inefficient.
81. But the Commission argues for a more extensive role for cost-based prices in paragraph 539. It says that incentivising an access seeker to efficiently deploy its own mobile network requires a cost-based access price.
- The logic of this is presumably that only an entrant that can build a network that costs less than the host's network costs will build if roaming prices are set at cost. In theory this will ensure that there is efficient entry and only efficient entry
82. This could work only if the Commission can perfectly set the price, if the price is set quickly, and if the Commission thought that wasteful over-investment in telecommunications was likely to be a problem.

83. However, the risk of imperfectly assessing the cost-based price is significant.
- Mobile networks can be economically replicated in most parts of the country. For example, NZ Communications is indicating that it will be happy with an 80% rollout requirement. The Commission does not need to set access prices for roaming in areas where building is possible. And it certainly does not need to push prices as low as possible (although it will doubtless want to make sure that prices do not go so high as to prevent entry entirely).
 - The biggest risk of this cost-based approach is in getting the access price too low. Given regulated access prices at costs, access seekers would likely follow their normal approach of regularly petitioning for lower rates and the Commission would likely follow its normal approach of continuing to lower rates where possible. This could lead to a situation where roaming prices were set so low that entrants choose not to build. This is in conflict with the basic objective of encouraging more mobile infrastructure investment.
 - The implication of regulating at the Commission's estimate of costs is ongoing debate and uncertainty about what the appropriate price is. Setting prices will take some considerable time, and make life very difficult for firms (like Vodafone and NZ Communications) who are trying to negotiate roaming terms in the meantime.
 - Avoiding inefficient over-building of mobile networks is hardly a pressing policy concern. New Zealand has not exactly been blessed by firms keen to sink their investors' money into telecommunications networks. A better approach would be to ensure roaming prices do not go too high, and leave it to the market to determine how many networks there should be.
84. This investigation is not like others the Commission has engaged in. Mobile is a contestable service. So lower regulated roaming prices are not necessarily better: in fact, as we have said many times, roaming rates that are too low are bad for investment. Yes, roaming rates need to be low enough to ensure that economic entry takes place, but regulating prices very low is a mistake because it will deter building of competing infrastructure.
85. The Commission can best achieve a higher level of mobile infrastructure investment not by setting prices at cost, but instead by ensuring roaming prices do not get so high as to deter new entry but that they are high enough to ensure a reasonable level of network building by new entrants.
86. TSLRIC is particularly difficult in this case for practical reasons too. There is feedback effect that makes TSLRIC hard to calculate.

- TSLRIC is basically total host network costs divided by total host network traffic.
 - In this case, the extent of the entrant's build affects the amount of traffic that is carried on the host network.
 - So as the entrant builds more network, the amount of traffic on the host network may fall, and this implies that TSLRIC should go up over time.¹¹
87. This may not be such a big issue on fixed networks, where average costs do not change much based on traffic. On mobile networks incremental traffic costs are higher, so the cost curve is steeper, and so changes in traffic might have a more pronounced impact on average costs.
88. Given all of this, from the two options for regulated pricing, retail-minus pricing is theoretically better in the case of regulating roaming.

But retail minus is fraught with difficulty too

89. We also know, however, that retail-minus prices are practically very difficult. This is especially for three reasons in this case:
- We continue to cut our retail prices very quickly. This will make a retail minus price very unstable.
 - Our average retail price (including access fees) per outgoing minute was [] VNZCOI cents in July 2007, but is expected to be [] VNZCOI cents in March 2008.
 - Rates vary between customers. This will open us up to allegations of price squeeze from those buying roaming services at regulated prices and mean ongoing and difficult issues for the Commission to arbitrate.
 - Our average prepay revenue per outgoing voice minute for July 2007 was [] VNZCOI cpm. The equivalent number for the whole customer base was [] VNZCOI cpm. Any access seeker is likely to complain to the Commission about an inability to match prepay prices based on a retail minus methodology.
 - Costs vary across the network markedly. Retail minus methods are not well suited to determining geographically de-averaged rates, since retail prices are the same everywhere across the country on mobile networks.

¹¹ This effect may be able to be avoided by using de-averaged pricing, which compensates for the entrant roaming in progressively higher-cost areas.

- These differences in cost are an issue we have covered in some detail in the de-averaged pricing proposal in our Undertaking. Averaged prices risk creating perverse investment incentives.

A practical solution might be a conservative benchmark and a de-averaged retail-minus final pricing principle

90. In this situation where cost-based prices are mistaken but plain retail-minus prices are impractical, options for setting regulated prices might include using a retail minus method to set an initial rate, but then de-averaging the retail-minus number based on our relative network costs in different areas.
91. In practice though this introduces needless complexity. A simpler approach would be to benchmark against MTRs as the Commission proposes, but to be particularly conservative in rate setting in order to preserve incentives to invest in mobile networks.
 - Rather than using its estimate of cost the Commission could use current MTR rates, for example. Or it could choose the 90th percentile of its cost-based MTR sample, or add some (arbitrary and small) increment to its 14 cpm estimate for a minute of voice roaming.
92. Choosing a final pricing principle is more difficult (which is another reason to commend the Undertaking).
 - If the Commission is going to regulate in areas where building is economically feasible, the best option might be a retail-minus price.
 - If the Commission restricts regulation to areas that can not be viably built, then TSLRIC would be a reasonable final pricing principle.
93. We do think that the Commission must deaverage roaming prices, regardless of how they are set.
 - The Commission states in paragraph 547 that it “will be appropriate to consider ways in which to ensure that the roaming price reflects efficiently incurred costs of supplying the roaming service”.
 - We suggest that it be clearer that it will implement a de-averaging approach to pricing and give some guidance on how it would plan to do this.

The Commission should be more cautious with regard to new technologies

94. The Commission is taking enormous and unnecessary risks with regulating new services and networks that have not yet been built. It is far better to leave decisions on 3G roaming or roaming for WiMax or other operators to firms. They are best placed to consider the issues involved and to come to a sensible balance of the risks involved.
95. At the core of our concerns is that the Commission does not need to regulate 3G (or WiFi or WiMax) roaming in order to assist new entrants into the market. Doing so brings additional risks of influencing investment incentives but little if any additional benefit for entrants' business cases. We also think the Commission has not justified the extension of access seekers to include potential mobile WiMax operators.

Regulation of 3G does not make sense in practice or theory

96. The Commission says that "new entrants must be able to offer similar services to the incumbents" (paragraph 306). Even if this is true, we would argue that entrants can offer similar services by building their own networks rather than having regulated access to ours. The need to offer decent services to secure customers is at the heart of the competitive process and we do not see why the Commission would want to do away with this incentive.
97. The Commission provides no other justification for its view that entrants need access to 3G roaming. This seems surprising given the significance of the Commission's decision in this case.

Regulation of 3G is wrong in practice

98. The facts are that:
- As at the end of June 2007, 3G customers made up only [] VNZRI of our customer base. Voice and text services (which are the same on 2G and 3G) constitute [] VNZRI of ARPU.
 - Based on these numbers, a 3G entrant who uses 2G roaming outside its coverage area will face only an infinitesimal reduction in its ability to compete, and if that influences customers at all, it will provide a useful incentive for the entrant to build out 3G coverage.
99. 3G roaming is also practically useless because of its still-restricted geographic availability. We provided 3G services to about [] VNZRI of the population by March 2007, which is a smaller proportion of the total population than NZ Communications says they will cover with their initial footprint in July 2008.

100. In the near term regulating only 2G will mean that only Vodafone is regulated. This was obviously a problem when considering the regulation of termination rates. In this case, we would be happy to have the roaming obligation and to take any roaming business in the meantime. Once Telecom has built its 2G network, we can compete for roaming traffic.

Regulating 3G is also wrong in theory

101. Regulating 3G is not necessary to solve the core market failure, i.e., to give an entrant nationwide mobile coverage from launch day.

- The Commission has not defined clearly what the market failure is that 3G roaming regulation is designed to address.
- But it appears to be arguing that there is a market failure any time competitors are not in a position to immediately offer “similar services to the incumbents”. This reasoning may lie behind regulated resale services for networks that are uneconomic to replicate. But it is not a justification for roaming service on a mobile network.

102. Not regulating 3G roaming is pro-competitive: the desire to offer 3G services outside its current coverage area will encourage an entrant to expand its network area.

- This is consistent with the ladder of investment thesis. If all services are regulated at prices equivalent to the Commission’s assessment of cost, then the incentive to invest is reduced.
- As we have said above, the Commission is seriously misjudging the real effect on investment of requiring us to make 3G and all other new technologies available to roaming competitors immediately.

Certainty on regulation of WiFi and WiMax services provided by cellular operators would be helpful

103. We are pleased that the Commission has clarified that it does not intend to regulate the provision of WiFi or WiMax roaming by mobile operators.

104. The position remains unclear in the Draft Report:

- The Commission would not allow us to exclude from our Undertaking access to roaming on any WiFi or WiMax services we might offer in the future to our retail customers (paragraphs 348 and 349).

- But the proposed service specification (paragraph 565) does seem to require the host operator to have a mobile network, which suggests that WiFi or WiMax roaming is not being regulated.¹²

105. We expect that the Commission will clarify this issue in its Final Report.

Access to regulated services should be tighter

106. We have three main concerns with the Commission's approach on access to regulated roaming terms:

- A rollout requirement for mobile operators would be a smart move. Not only will it help to support infrastructure building, but it provides a simple safety valve: if anything goes wrong with roaming regulation, a rollout obligation will help to minimise the impact of errors over time by aligning the costs of network operators.
- The Commission's 25% market share restriction on roaming in the cities seems unwieldy. We suggest an alternative based on network population coverage to exclude Vodafone and Telecom from accessing regulated roaming.
- We do not think that access to cellular mobile roaming for WiMax or WiFi roaming should be priorities now. We can see nothing in the Commission's Draft Report that demonstrates a market failure that requires regulation, nor are we aware of any serious attempt by WiMax or WiFi operators to try to negotiate access.

A network rollout requirement is a good idea

107. As the Commission relates (paragraph 438 to 443), all the current and future cellular mobile operators think that a rollout requirement is a good idea.

108. This regulation is designed to affect incentives to invest in new mobile networks. In our view there is a risk that the effect of the Commission's work will be to reduce incentives to build networks, especially if it is going to regulate roaming prices on unbuilt networks at cost.

109. A rollout requirement would be a sensible safety valve for mobile operators to mitigate against the worst possible impacts on network building.

- NZ Communications is the only entrant building new cellular mobile coverage and it has said it is happy with a rollout obligation to 80% of the population over five years.

¹² We are also concerned that the definition of "mobile" is not clear. We come back to this point below.

110. The table below shows what proportion of the population live where based on 2006 Census data.¹³ In our view a rollout requirement to at least the equivalent of the six biggest cities makes sense, i.e., around 60%.

- This is equivalent to the initial rollout of NZ Communications in recent public statements.

Table 2: Geographic distribution of the population

City/Town	Population	% of Total	Cumulative %	Threshold
Auckland	1,302,954	32%	32%	
Wellington	448,947	11%	43%	
Christchurch	354,678	9%	52%	50%
Hamilton	149,277	4%	56%	
Dunedin	111,009	3%	59%	
Tauranga	103,659	3%	61%	60%
Palmerston North	79,572	2%	63%	
Hastings	61,107	2%	65%	
Nelson	58,236	1%	66%	
Napier	56,319	1%	68%	
Rotorua	50,895	1%	69%	
Invercargill	48,678	1%	70%	70%

111. If access for WiMax operators is to be regulated (and we do think that it should not be), these operators might usefully be an exception to the rollout requirement. It seems unlikely that WiMax operators will build wide area coverage outside of dense urban areas: at 2.3GHz or 2.5GHz this would be prohibitively expensive.

The 25% market share restriction would be better crafted as a restriction based on network coverage

112. The Commission recognises that allowing roaming forever at low prices might impact investment incentives (paragraph 506). This leads it to propose that any operator with more than 25% market share in the mobile market should no longer be able to roam in the cities.

113. We agree with the sentiment behind this proposal, but we are not sure it works in practice.

- Roaming in the cities is not the main issue. There will be competing network builds (and roaming) in the cities anyway, because there building is economically feasible. Regulation of roaming in the cities is unnecessary. And therefore it makes little difference to

¹³ Note that the population figures for the major cities are estimates since no definite city boundaries are defined in the census data. Note also that this method of counting coverage is not the same method we use when assessing the geographic coverage of our network.

remove regulation of roaming in the cities once an entrant reaches 25% (or any other) market share.

114. The Commission's proposal will allow all operators to seek access on regulated terms to roaming on at least the high cost parts of any other operator's network.
- This is wrong in principle. Neither Telecom nor Vodafone needs regulated roaming to offer nationwide coverage to its customers. Both firms already have nationwide mobile coverage.
 - Roaming regulation is designed to assist a new entrant mobile operator to secure customers while they build out their network. The Commission should focus its attention on this assistance rather than get drawn into peripheral issues.
 - Such wide regulation seems likely to lead to unnecessary disputes. Regulating all networks and allowing all operators regulated access will have the result of encouraging regulation as firms game the regulator to get the other to make costly network investments that they can then roam on for cheap.
115. We understand that the Commission does not want to mention either Vodafone or Telecom by name in the regulation, preferring a more competitor-neutral approach to the service specification.
116. A better alternative might then be that an access seeker loses access to regulated roaming once it has built 80% population coverage. This means coverage to an extensive swathe of rural New Zealand.
- By that point an access seeker is unlikely to need regulatory assistance to negotiate roaming; it will have a sizeable quantity of customers and traffic and will be able to negotiate for itself.
117. On one further small point, the decision that the Commission refers to in paragraph 500 was annulled on appeal and costs were awarded against the Irish regulator.¹⁴ On that basis, we would consider it unwise for the Commission to rely on this ComReg decision at all.

Regulating access to WiFi and WiMax services is unnecessary at this stage

118. The Commission talks about inter-network roaming in paragraphs 449 to 465. It is not clear precisely what this means by this term. It seems to mean allowing access seekers who are building non-cellular networks to access cellular mobile roaming on regulated terms.

¹⁴ <http://www.ecap.ie/Previous+Appeals/Joint+Dominance+Appeals.htm>

119. The Commission wants to allow WiFi or WiMax operators access to regulated roaming on cellular networks (paragraph 463), and allow “fixed-line operators interested in other wireless technologies” to access regulated roaming on cellular networks (paragraph 464).

There does not appear to be any justification for regulation in favour of WiMax, WiFi or fixed-line operators

120. We are comfortable with offering roaming to WiMax operators or other firms so they can offer service outside their coverage areas on a commercial basis.
- By the time mobile WiMax services are technically feasible we would expect there will be at least three W-CDMA networks for operators to seek roaming on. We look forward to an approach from any of them for commercial terms.¹⁵
121. We do not think the Commission can justify regulating access to mobile roaming for these operators on the information in the Draft Report. This seems to be the consistent position of all the actual and potential mobile operators. The Draft Report is proposing regulation of networks that have not yet been built for access seekers who are not even using mobile technology, and who have made no attempt at all to negotiate terms.
122. We can see no market failure in respect of these operators. Two at least (Woosh and CallPlus) have launched commercial services and are accumulating customers without nationwide coverage. There does not seem to be the same need for mobility for these operators as with a mobile network. The Commission presents no evidence on this point at all in its Draft Report.
123. There are also difficult issues of market definition to be resolved.
- It is far from clear to us what services the WiMax or WiFi operators the Commission is referring to will offer. Nor is it stated in the Draft Report whether those services will be in the mobile retail or wholesale markets that the Commission has defined. We would urge the Commission to follow its normal regulatory practice and consider this question in some detail before moving to propose regulation.
 - The Commission refers to the “mobile broadband” market, without further definition in paragraph 394. If the Commission is proposing a regulatory response to concerns about that market, it should be clearer about the definition of that market, and the nature of any competition concerns.

¹⁵ [

124. This proposal is so uncertain as to be likely to give rise to unintended consequences.
- For example, Vodafone assumes that it cannot be the Commission's intention to allow any device that may utilise WiFi or Bluetooth to access VOIP services around the home or office to be entitled to access the roaming service from Vodafone where that device leaves the home or office.
125. Certainly we would normally encourage the Commission to be both forward-looking and technology neutral in its approach, but this does not mean that all technologies should be regulated at all, and nor does it mean that the Commission should drop its basic standards of analysis.
126. If the Commission after some analysis concludes that regulation is required, then the Telecommunications Act provides multiple ways that the Commission could seek to address this issue.
127. On one smaller point, the Commission says that spectrum for WiMax deployment will become available by the end of 2007 (paragraph 461). This is not our understanding:
- Although it is possible that the 2.3 GHz band could be used now by private agreement with the existing rights-holders, the 2.5 GHz band will not be available until January 2009. Worldwide the 2.3GHz band is only supported in Korea and it is not widely used.

Summary of proposals

128. We thought it might be useful to summarise our suggestions for the Commission after this review of the key issues:
- Focus attention narrowly on solving the problem of ensuring new entrant mobile operators can offer nationwide service from launch day.
 - Clearly state what the risks and costs of regulation are, and choose the regulatory solution that solves the problem at lowest cost, most quickly and with the most certainty for the industry.
 - Consider carefully all the impacts of roaming regulation on incentives to build mobile networks by new entrants and existing operators.
 - Do not regulate the price of roaming anywhere where building is feasible (like where the new entrants are telling you their initial footprint will be).
 - If you must regulate roaming prices nationwide, do not try to push prices down too low. New Zealand does not have a problem with

over-investment. Focus instead on ensuring roaming prices are not unreasonably high rather than on ensuring that they are as low as possible.

- Do not regulate 3G, WiFi or WiMax services. 2G access will solve the problem of nationwide coverage just as well and regulating 2G is much lower risk.
- Do not allow WiFi or WiMax operators access to regulated roaming without further analysis of the relevant markets, some evidence of an actual problem with negotiating access commercially, and proof that these operators actually need nationwide coverage in order to offer services.
- Maintain a rollout obligation for mobile operators out to 60% of the population over five years.
- Do not allow access to regulation for any firm that already covers 80% of the population with any mobile technology.

V Decision-making framework

129. In this section we comment on two issues raised by the approach to decision-making the Commission takes in its Draft report.

- The Commission's decision-making process is unusually loose in this case. Its first task is to clearly define the problem but it has failed to do so. Once the problem is clearly defined, the Commission must keep the problem as the focus of its inquiry. Here the Commission accepts a very low threshold for the assessment of whether regulation has any benefit, and it does not sufficiently consider dynamic efficiency issues that are normally a key consideration in its work. As we explained above, we are also concerned that the Commission has taken the wrong approach to market definition.
- The Commission also appears to be influenced by issues that seem to us to be irrelevant. This may be because the Commission has lost focus on the problem it is seeking to resolve. One of these irrelevant issues is the terms Vodafone is willing to offer in the Undertaking or in commercial agreements. These have little relevance to the Commission's assessment of whether regulation is justifiable and, if so, on what terms.

Commission approach to regulatory decision making

130. Vodafone has serious concerns with how the Commission has made its case to recommend roaming as a designated service. Aside from market definition, which we cover below, our main concerns are three:

- The Commission has not clearly defined the problem it is trying to solve, and has not linked the regulatory proposals put forward in the Draft Report to any market failure.
- The Commission seems to have set itself a low threshold in establishing what is for the long-term benefit of end-users, and
- The Commission has not appropriately considered a fundamental issue, the dynamic efficiency impacts of this proposed regulation.

The problem definition seems weak

131. Vodafone submits that the Commission should clearly identify and articulate the precise competition issues that the Commission is attempting to address through regulation. It is only by reference to a clearly defined market failure that the Commission can proceed to consider possible regulatory solutions to best address the competitive issues and therefore meet the long-term interests of end-users.

132. We infer from the Draft Report that the Commission considers that the inability to obtain national roaming at the Commission's estimate of the cost of the service is a key cause for a lack of new mobile entry.
133. However, the Commission acknowledges that there are other factors that blur the relationship between roaming and entry.¹⁶
134. These "other factors" ought to condition the Commission's willingness to assert that regulating roaming prices will best promote mobile market entry.
- The Draft Report fails to reconcile TelstraClear's failure to enter the mobile market despite having (twice) commercially agreed national roaming provisions with Vodafone.
 - By failing to address TelstraClear's abandoned mobile entry, the Draft Report fails to address a clear challenge to the proposition that price regulation will cause mobile entry and therefore that regulation will best deliver long-term benefits for end-users.
 - Similarly the report fails to acknowledge current efforts by Vodafone to reach a commercial settlement with NZCL. Vodafone expects to conclude such a commercial deal imminently. At this point the Commission's case for demonstrating a market failure or a general unsatisfied appetite for roaming will be seriously undermined.
135. The Commission will be well aware that the ACCC concluded that the benefit of roaming regulation appeared questionable once commercial roaming arrangements had been agreed between incumbents and declared new entrants.¹⁷ Note also that roaming will continue to be regulated as a specified service, regardless of whether the Commission decides it should also regulate prices.
136. In addition, the Commission's regulatory proposal goes far beyond what is necessary to solve the inferred market failure. And these extensions of regulation are nowhere in the report related back to the core market failure that the Commission is trying to address.
- The Commission is regulating 3G services, CDMA and EVDO networks, and all new mobile networks built by any operator at any time for five years. It does not at any stage that we can find in the Draft Report explain how all this regulation is necessary to deliver nationwide coverage for new entrants.

¹⁶ "While there may be other factors that have contributed to the lack of a third mobile entrant, the ability of incumbents to set the price of the roaming service, and the relatively high roaming rates offered, are likely to have been significant issues for prospective entrants" (paragraph 12).

¹⁷ ACCC, Mobile Services Review Final Report, December 2004, page 39-40

- The Commission is also proposing to allow WiMax and WiFi operators to access regulated roaming services. We can not see anywhere in the report any justification for this proposal by way of reference to an identified market failure to which regulation is the best response.

The “significant influence on the likelihood of entry” test is too loose

137. Vodafone is also concerned with the Commission’s lack of analysis of the impact that new entry will have in the roaming, co-location or retail mobile markets.

- The Commission considers the impact that Telecom’s entry would have on competition for roaming in three paragraphs (paragraphs 139 to 141). This treatment does not provide any basis at all for assessing likely market behaviour following entry. The Commission does not consider the impact that NZ Communications would have on this market.
- The Commission does not consider at all the impact of Telecom and NZ Communication’s announced network builds on competition for co-location or in the retail mobile market.

138. The Commission appears to have significantly lowered the bar for establishing the case for new regulation. To meet the statutory threshold of establishing that regulation will best promote competition for the long-term benefit of end-users, the Commission suggests a test based of a series of assumptions and likelihoods. Paragraph 13 says (emphasis added):

“The Commission’s analysis shows that regulation of the price of the roaming service is likely to have a significant influence on the likelihood of entry, and in particular would enhance the prospects of new entry compared to what would otherwise have occurred in the absence of actual regulation or the threat of regulation”.

139. In our view the Act places a higher burden on the Commission than simply that regulation will “enhance the prospects” of a new entrant. We would expect all regulation of incumbents to enhance the prospects of new entrants, but this does not mean that regulation will always promote competition for the long-term benefit of end-users.

140. The Commission is obliged to meet a higher evidentiary standard than that indicated in paragraph 13.

Commission has failed to adequately consider the importance of innovation and investment over time

141. In our view the Commission has failed to give appropriate consideration or weight in its Draft Report to the impact on dynamic efficiency of its regulatory proposals.

- As we have mentioned above, the Commission has dismissed any concerns about impacts on investment from this regulation in remarkably short time. This is despite the fact that, in our view, influencing investment patterns in mobile is the primary purpose of this regulation.

142. In addition it seems out of keeping with the Commission's usual practice and with a standard view of the Commission's responsibilities under the Telecommunications Act.

- In other investigations the Commission has acknowledged that dynamic efficiency is of greatest importance when weighting efficiencies in regulatory decision-making.
- The Commission's own Guidelines emphasise the importance of dynamic efficiency and rank dynamic efficiency greater than static efficiencies in promoting competition for the long-term benefit of end-users.¹⁸
- The "long-term" context in which the Commission must assess benefits to end-users of telecommunications services under section 18 implies for us that impacts on investment and innovation must be carefully considered in relation to regulatory proposals.
- Statements in the parliamentary debates on the Telecommunications Act 2001 where the need for regulatory incentives that will encourage investment in the telecommunications industry for the long-term benefit of end-users are emphasised.¹⁹

143. Vodafone considers the risk to dynamic efficiency is more significant here than in other markets the Commission has previously considered.

- The Commission is proposing to regulate networks which are neither complete nor even contemplated by investors, removing

¹⁸ Commerce Commission, "A Guide to the Role of the Commerce Commission in making access Determinations under the Telecommunications Act", (28 May 2002), paragraph 113.

¹⁹ For example, in a Ministerial Statement on 20 December 2000, Hon Paul Swain stated: "In a highly competitive market like [telecommunications] we need as much market as possible, as much government as necessary. [The regulatory framework] is designed to promote investment in, and competition in such a way that people decide to invest in, telecommunications in New Zealand, not because of regulation, but because of return on capital."

the normal ability to gain first-mover advantage through investing in new technology. We fear that all mobile operators (incumbents and new entrants alike) will be incentivised to slow investment in an attempt to free-ride on the investment (and risk taking) of others.

- Regulators around the world commonly accept that investors must be entitled to capture first-mover advantages in markets without fear of immediate regulation to ensure that firms have incentives to invest in new services. We are not aware of any regulator in the world who has implemented regulation of 3G or HSDPA roaming, let alone roaming on networks that have not yet been built, including those of new entrants.
- The Commission has also made no allowance for the risk of regulatory error in its Draft Report. In our view the risks of regulatory error must be higher when dealing with new and emerging technologies.
- More generally, we view dynamic efficiency as a particularly acute issue in relation to mobile services, where technology life-cycles are particularly short and competing infrastructure deployment is a constant. A lack of investment will show itself in higher prices and worse services over time as firms maintain older technology rather than invest in newer technology.

144. The Commission must consider these issues more fully in its Draft Report, even if it does not agree that it should weight dynamic efficiency considerations more highly than other issues.

- The Draft Report simply fails to acknowledge the very real impacts on investment incentives in regulating 3G roaming at the Commission's estimate of a cost-based price. Removing any ability for network owners to technologically differentiate their networks through innovation and investment is a very risky endeavour indeed.

The Commission seems to be influenced by issues that are irrelevant

145. Commercial behaviour or the details of what Vodafone is offering as part of its Undertaking application are not arguments that can properly be used to support the case for greater regulation. On the contrary, anything Vodafone does commercially, or the terms and conditions Vodafone may offer as part of its Undertaking application can only undermine the case for regulation.

146. There are at least three places in the Draft Report where the Commission seems to use this type of reasoning.

147. In paragraph 480 and 481 the Commission cites Vodafone's commercial intentions as evidence in support of regulation:

"The Commission also notes that Vodafone, in various submissions made to the Commission as well as at the recent TUANZ conference, has found that 3G has greater capacity than 2G and therefore its 3G capacity is currently under-utilised. At the TUANZ conference Vodafone announced that it would be offering wholesale deals to other industry players who are interested in launching mobile services, as 3G is the future of mobile services.

The Commission considers that if Vodafone is offering its excess 3G capacity to other providers, it should not discriminate on the basis of the type of entrant (i.e. whether the entrant is a facilities or service based entrant)."

148. The Commission correctly points out that Vodafone's 3G network is underutilised. However, the Commission then almost appears to be suggesting that Vodafone would be fortunate to have 3G roaming regulated, because it will help it to fill up Vodafone's network. Under-utilisation is not an argument for regulation at all.

- If Vodafone is foolhardy enough to invest in a network that our customers do not want to use then that is a matter for Vodafone's management and shareholders.
- The Commission's objective is to assess whether lack of access to 3G roaming prevents mobile entry. Using regulation of access to our network to increase our productive efficiency is not within the Commission's remit.

149. The Commission also seems to be suggesting that regulation of 3G should be okay because Vodafone offers 3G access commercially or without any requirement that an access seeker roll out a network as a condition of access to roaming. This is simply not relevant.

- The Commission must prove that there is a market failure to which the least cost solution is regulation of 3G services. Showing that Vodafone is prepared to sell these services commercially undermines the case for regulation: it can not support it.

150. Similarly, at paragraph 131 of the draft report, the Commission appears to be using the price terms made as part of Vodafone's Undertaking application as evidence of excess commercial pricing:

"Submissions received by the Commission suggest that the roaming rates offered to potential new entrants by incumbents before the advent of the Schedule 3 investigation have been considerably in excess of cost. More recently the roaming rates offered to potential new entrants have declined"

151. In footnote 35 the Commission says:

“Vodafone in its submission on the Issues Paper, note that the terms proposed in their undertaking (original undertaking) are a reasonable estimate of an average-based rate for roaming. However, the rates provided to potential entrants were around [] CRI higher than the Vodafone original undertaking.”

152. The fact that Vodafone offers different pricing or conditions as part of its commercial negotiations or Undertaking application does not affect the Commission’s task.

- The Commission needs to prove that regulation is the least cost solution to an identified market failure that will lead to the greatest net benefits for end-users.
- The fact that Vodafone might offer certain terms commercially or in the Undertaking application should not provide the Commission any grounds to justify regulation.

153. In the case of the Undertaking in particular, we are attempting to find a solution that will avoid the discomfort of regulation for all parties. The terms we offer reflect our view of the risks of regulation and the value of having these issues resolved.

- As one example, offering 3G roaming (after a period) in the Undertaking does not indicate comfort with the regulation of 3G roaming. In fact it simply reflects our perception of the risk that the Commission may mistakenly regulate 3G roaming.

VI Market definition

154. In this section we consider the definition of markets in the Draft Report.
155. We continue to think that the markets the Commission defines are too narrow, and that the definitions are inconsistent with the available evidence and theory.
156. The key point we make in this section is that there should be two markets for roaming, separated by geography. In one market would be the areas where an entrant can economically build a network. In another market would be the areas where an entrant can not economically build.

Roaming markets must be geographically separate

157. The Commission continues to define a nationwide market for roaming (paragraph 104). It reviews our analysis (paras 94 to 99), but seems distracted by the question of whether co-location and roaming are in the same market. This is one of our arguments (which we consider further below) but it is not the key point.
158. The key point is that, leaving aside co-location entirely, the roaming market must be geographically segmented between areas where building a network is economically viable and areas where it is not.
159. To see why this is so, we can walk through the standard SSNIP test.
160. Consider first a small geographic area – say central Auckland. And assume that roaming in this area is provided only by a hypothetical roaming monopolist. This means that if a hypothetical entrant wants to buy roaming in central Auckland, it has to buy it from this one firm.
161. Now if the entrant can economically build its own network to serve central Auckland customers, and thus bypass the roaming monopolist entirely, then in central Auckland building and roaming must be substitutes.
- If the hypothetical monopolist were to raise the price of roaming above the entrant's build cost in central Auckland, then the entrant would build in central Auckland, defeating the price rise.
 - This outcome is obviously efficient. The entrant builds if its costs are lower than the offer of the hypothetical monopolist.
 - In addition, the monopolist knows that the entrant will build if the monopolist can not offer the entrant a low enough price. And so the monopolist has strong incentives to offer a price that is equivalent to the entrant's costs.

162. The logic of the SSNIP test then says that we add more areas into the mix until we reach the point where a price rise by the hypothetical monopolist is sustainable.
163. Following this test through logically leads to two sets of areas:
- a set of areas where entrant can economically afford to build (where the hypothetical roaming price rise is not sustainable), and
 - a set of areas where building is not economic (where the hypothetical price rise is sustainable).
164. Since competitive conditions are likely to be similar in all the areas where building is feasible (i.e., the market will be contestable), and all the areas where building is not economically feasible (i.e., there will be limited competition), these two sets of areas can sensibly be treated as two markets.
165. This result seems to us to be entirely intuitive. It is also supported by theory in the form of the simple model that we proposed in our response to the issues paper.
166. The Commission considers this model in its Draft Report (paragraph 96), but its analysis is confused.
- The Commission says that we argue a new entrant would have to get 60-70% market share in the current mobile market to consider building and roaming as substitutes. It points out that such an assumption is "completely unrealistic".
 - We were not suggesting that an actual third entrant would ever get 60-70% market share in the current mobile market. This was clearly stated in paragraph 29 of our market definition paper submitted as part of our work on the Issues Paper. In a letter to the Commission on 10 July 2007 (referenced in paragraph 251 of the Draft Report) we explained that we think a successful new entrant to the New Zealand market might secure about 15% market share over five years.
167. The heart of the confusion is that the SSNIP test is a hypothetical monopolist test. So we were talking about a hypothetical entrant competing with a hypothetical monopolist, not the current mobile market.
168. If competing with a hypothetical monopolist, 60-70% market share is challenging but possible. After all, BellSouth and then Vodafone were competing with an actual monopolist, and we have achieved 60% revenue market share.

169. In any case, as we also said in our submission, this 60-70% is an overstatement. This because there are two factors that reduce the 60-70% figure:

- If supporting roaming generates additional costs for the host network then the percentage falls. In fact, as we know, roaming does generate additional costs for the host network.
- If the entrant has lower costs to build then the percentage also falls. Certainly Woosh maintains its cellsite costs are dramatically lower than ours (paragraph 266).

170. The overall conclusion on roaming market definition is very straightforward:

- Any geographic area where the entrant can economically afford to build (and therefore does not need to buy roaming) will be in a separate market. As we have said previously, coverage of the six main cities (or about 60% population coverage) could be a reasonable estimate of this area.
- This market will be geographically bigger if the entrant's costs are lower than the host's (which they seem to be) and if roaming generates additional costs for the host network (which it does).

171. The Commission points out (paragraph 95) that there is a time difference between roaming and building, i.e., that it takes some time to put up a site but that roaming can be faster than this.

172. This is true, but it is not determinative for market definition. The Commission typically takes a one year time horizon when using the SSNIP test.²⁰ And we do not think that it would take a year longer to build coverage in an area where building was viable compared with setting up roaming in the same area.

173. There is some very simple practical evidence on this point. NZ Communications has doubtless told you the areas in which it intends to build and not roam when it first launches GSM services. This initial footprint seems to cover a large proportion of the population.²¹ By definition, these areas must be areas where roaming and building are substitutes. So at least these areas must be in a different market from areas where entrants are not planning to build.

²⁰ We are relying here on section 3.1 of

<http://www.comcom.govt.nz/BusinessCompetition/MergersAcquisitions/MergersAcquisitionsGuidelines/marketdefinitions.aspx>

²¹ NZ Communications has suggested building an initial footprint to 60% of the population, rolling out to 80% of the population in time. See <http://m-net.net.nz/theline/3666/regulation/co-location/new-zealand-communications-plays-green-card-to-fast-track-mobile-p.php>

174. To us this geographically segmented roaming market definition analysis is straightforward and highly intuitive. We do not understand why the Commission is stuck to its existing nationwide definition when it is so patently out of line with both logic and the available evidence.
- We agree with the Commission that it must avoid roaming charges that are so high that an entrant can not afford to enter at all.
 - We also agree that there will be a need for roaming assistance in all areas while the entrant is building its network. This does not require regulated roaming prices though, but simply that roaming be available.
175. A simple approach might be to define two markets:
- One for roaming in the five major cities (or at least wherever the Commission thinks NZ Communications will build in the first five years). In this market, roaming will continue to be regulated under the existing regulation but the price and details of the service will be set by commercial negotiation.
 - One for roaming outside those areas, where the Commission can set the maximum price that can be charged if it decides to recommend rejection of the Undertaking.

GSM and CDMA roaming should be in one market

176. The Commission concludes that GSM and CDMA roaming are in different markets (paragraph 79). According to the Commission a new entrant would make a technology decision before approaching a potential roaming provider.
177. This is interesting because it supports our argument that GSM and CDMA are in the same market.
- If, before entering, the entrant considers all the factors that will influence its entry decision, including the technology choice, then GSM and CDMA operators are competitors at this point: the entrant can choose either technology and will consider both.
178. This single-market is consistent with the only evidence that we can see in the report: we understand that Hutchinson considered roaming offers in Australia from both GSM and CDMA operators and decided to go with CDMA.

179. It is also consistent with other evidence that GSM and CDMA are substitutes. TelstraClear has recently switched from GSM to CDMA services.²²
180. There is also another good reason why CDMA and GSM should be in one market. The entrant knows that it will be committed to a particular technology once it chooses between CDMA and GSM. It will see the problem that will arise further down the track because of the costs of switching technologies. In these circumstances we might expect a long-term roaming contract to result, with an agreed process for extension.
181. What this means is that at the relevant time (before it signs this long-term contract) roaming on GSM and roaming on CDMA are substitutes: the entrant can choose either and the fact that it can not switch later does not affect the substitution possibilities at first.

The co-location market definition is too narrow

The current co-location market definition defies the evidence

182. The Commission is defining a nationwide market for co-location on cellular transmission sites (paragraph 119)
183. This market definition is contrary to common sense when one looks at what is actually going on in the market at present.
- In urban areas there are many options for cellsites, since they can simply be placed on buildings. There are an enormous number of buildings in urban areas that can host cellsites. In the Covec 3G model, for example, more than [] VNZRI of the 3G sites in Auckland are on rooftops.
 - In addition, there are other co-location options. In rural areas, using Kordia or Transpower's sites is possible, for example. We share more sites with Kordia than we do with Telecom.
184. So the market definition, just to recognise current practice, must extend to at least substitutes for cellphone sites in urban areas (i.e., buildings) and substitutes for cellphone sites in rural areas (e.g., Kordia or Transpower's sites). There is no justification for such a narrow definition as the Commission's.

²² End-users also seem to see CDMA and GSM as substitutes: in New Zealand customers divide themselves reasonably evenly between the two technologies and seem relaxed about switching between them.

There is also an issue about the places where co-location and roaming are in one market

185. Based on our comments about geographic differentiation of markets above, anywhere that an entrant can economically afford to build will also be a place where an entrant can afford to co-locate, and therefore a place where roaming and co-location are in the same market. Co-location is just one strategy for network building.
186. Following this logic through for all geographic areas leads to two markets for co-location:
- A set of areas where co-location is in the same market as roaming, i.e., where building (using co-location) is economically feasible. There is no need to regulate co-location in these areas, since building new sites is feasible.
 - A set of areas where building is not feasible, and where co-location and roaming are not therefore in the same market. There is a theoretic argument for regulation of co-location in these areas, but there is unlikely to be any demand at all for co-location in an area since by definition building is economically infeasible.

The Commission's views on optimal sites are unsupported

187. The Commission continues to argue that existing operators have exclusive access to the best cellsites. We continue to wait for the Commission to justify this point of view with any evidence.
- From our experience with building 1,400 sites, there are a handful that are particularly useful (like Telecom's sites on the Auckland Harbour Bridge or at the Viaduct Harbour), but even those are readily substitutable. Firms compete for access to the best sites just as they compete for other resources.

VII Competition assessment

188. In this section we comment on the Commission's assessment of competitive conditions in the relevant markets (bearing in mind that we disagree with its market definitions).
189. The Commission is unduly pessimistic about competitive conditions, particularly in the retail mobile market.
190. The Commission uses highly contestable evidence based on information that no longer reflects the state of the market, and uses that evidence to draw erroneous conclusions.
191. A more realistic view of the market would be one that is characterised by increased usage, declining prices, the construction of two other GSM networks, and the growth of a wholesale market.
192. We invite the Commission to look again at the evidence, and to be clearer about the conditions under which it would consider these markets to be effectively competitive.

Roaming is about to become far more competitive

193. The Commission concludes that competition for roaming is limited and will still be limited even when Telecom builds its GSM/W-CDMA network
194. The Commission does not mention NZ Communications. As noted previously, we understand that it is planning to launch in mid-2008 with a widespread initial footprint. We would expect the Commission to conclude that a third provider will make a significant difference to the competitiveness of the roaming market.
195. It would be useful if the Commission could indicate what it would need to see before it could consider the roaming market workably competitive.
 - The Commission refers to concentration and to high barriers to entry (paragraph 140). These are not helpful indicators for firms seeking certainty on future regulatory requirements, since even in much larger markets there are unlikely ever to be more than a handful of mobile network operators and so concentration and costs of entry will continue to be high.
 - We note that even countries that do not regulate roaming at all (for example Australia) have HHI ratios that indicate high concentrations on the usual industry measures.

196. Our view is that the market is segmented geographically into places where more than one network is feasible and places where more than one network is not feasible.
197. In places where building is feasible the market is contestable (i.e., the existing operators are not free to raise roaming prices above the entrant's build costs).
- If building is feasible, existing operators would rather have roaming business than not. Once an entrant is going to enter, then the incentives to offer roaming only run one way: existing operators can either offer roaming on acceptable terms and get the business, or not offer roaming and have the entrant build more aggressively.
 - The only exception to this is if operators can set such a price that the entrant abandons plans to build at all. We do not think that this is possible in current circumstances, nor has the Commission presented any evidence that could support this argument.
198. Put another way, in places where building is feasible it is not clear that higher roaming prices are better for existing operators because they lead to a more aggressive network buildout by an entrant.

The Commission's view of the co-location market is not in line with the available evidence

199. The Commission presents no evidence for its view that competition is limited in the co-location market. The assertions that we have control of the optimal sites and limited incentives to offer co-location (paragraph 143) have never been supported.
200. The Commission's view of the market is not supported by the facts.
- Econet delighted in presenting pictures at the Commission's extension review conference of hillsides festooned with towers.
 - Econet used this to support an argument that co-location was not working, but it also represents evidence for the view that there are many options for co-locating. There were many hillsides with multiple towers on them, all of which are potential competitors for co-location business
 - The Commission's assessment does not refer to the valuable work of the TCF in developing the co-location code (which is not restricted only to cellsite co-location) and the master co-location agreement, both of which seem to boost the competitiveness of co-location markets. The TCF is now at work on industry-wide co-siting arrangements.

- Nor does the Commission refer to the announced network builds of Telecom and the expected build of NZ Communications, both of which will mean more new sites that will boost co-location options for new entrants.

Retail mobile market outcomes look good for consumers

201. New Zealand does not have relatively high prices for mobile services. The OECD figures are the only evidence that the Commission presents on this point and, as we have pointed out for years, they are not correct or complete as evidence of what is happening in the New Zealand mobile market. This is because they leave out important features of the New Zealand market, especially capped calling and text prices.
202. Below we present some evidence on what is actually going on in the retail mobile market. The Commission refers to changing market shares and OECD retail price comparisons in its report. There is a lot of other evidence that the market is working very well for consumers, including low and falling prices, increasing usage, high churn, and massive new investment.
203. We continue to offer more and more competitive products and prices on our mobile network in an effort to boost mobile usage and attract minutes from Telecom's fixed network. Understanding of our plans to increase the value of mobile is key to understanding the competitiveness of the mobile market in New Zealand at present.
204. In addition Telecom's new networks and NZ Communication's and TelstraClear's re-entry are likely to change the competitive conditions in the market in the near future.
205. It would be helpful if the Commission would broaden its assessment beyond the flawed Teligen retail price comparisons.

Prices continue to fall

206. Mobile retail prices for SMS and broadband data are already amongst the lowest in the world. It would be helpful to have the Commission specifically state that the market is already delivering for SMS and data customers, or do some analysis to support a contrary view.
207. On voice, our view is that prices are already comparable with many countries and the situation continues to improve for consumers.
 - Voice prices fell 30% in the last year. Our outgoing voice revenue per minute (including monthly fee revenue) fell from [] VNZCOI

cents per minute in April 2006 to [] VNZCOI cents per minute in July 2007.²³

- We expect rates to continue to fall quickly. In the most recent plan we expect a rate of [] VNZCOI cents on average for 2007/08, [] VNZCOI cents for 2008/09 and [] VNZCOI cpm for 2009/10.

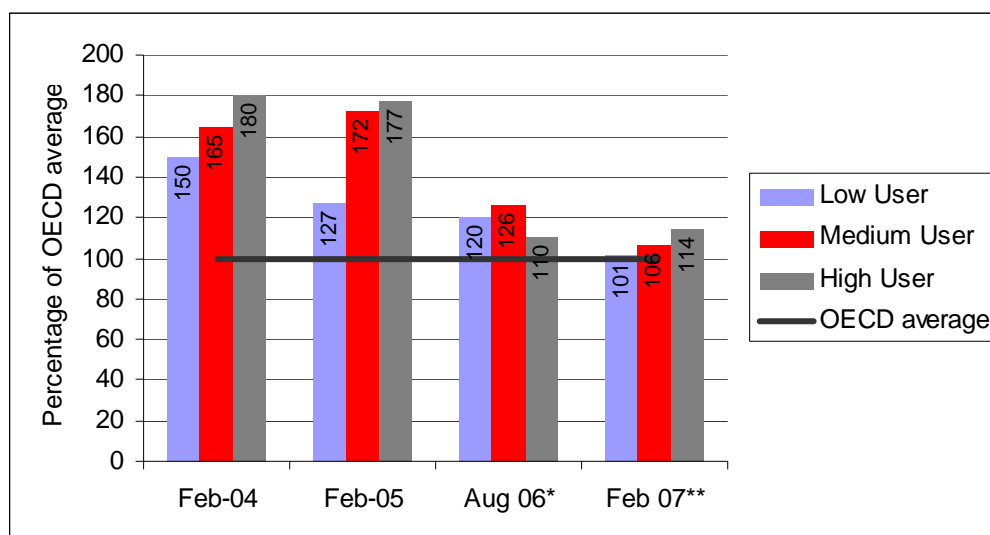
208. Vodafone New Zealand's prepay rates are below the average of other Vodafone Operating Companies already, and they are expected to continue fall very quickly.

The OECD figures are only part of the story

209. Even on the OECD figures New Zealand is now at or slightly above the OECD average. And the position continues to improve.

- As the Commission notes (paragraph 219), Vodafone has publicly committed to ensure that New Zealand will be in the top half of the OECD mobile retail price rankings.

Table 3: New Zealand's ranking on the OECD comparisons over time



* Aug 06 data used due to errors in Feb 06 and May 06

** Feb 07 data as reported by the Commission

210. The Commission takes an inconsistent approach to the benchmarking figures.

- It notes that the Base plans have characteristics that indirectly increase costs to consumers such as early termination penalties, no handset rebates and no international roaming.

²³ The comparable figures for April 2004 and April 2005 were [] VNZCOI cpm and [] VNZCOI cpm respectively, demonstrating that we have been cutting prices sharply for some time.

- In doing so it implies that plans in other countries do not have terms and conditions that increase costs to the consumer.
 - Unless it is willing to undertake the research on the terms and conditions for comparable plans in other countries it should avoid making such comments in the context of OECD benchmarking.
211. The Base Plans provide excellent value for a particular usage pattern but we do not consider them to offer the value of many of our other plans for the majority of our customers.
- As we have previously noted to the Commission many other plans bring lower revenue per minute and per SMS than the Base Plans and therefore offer greater value to our customers.
212. The Commission is well aware of our view that the OECD figures are not reliable or comprehensive. They do not cover all offers in the market, including, for example, capped text and calling offers that are very popular with real customers in New Zealand.
- We find it hard to believe that the Commission continues to rely solely on figures that do not include capped text products in the figures when at least [] VNZRI of our customers favour these products with their custom.

We encourage the Commission to look closely at the reliability of the OECD figures

213. Below we compare the OECD ranking for prepay users for May 2007 with the ranking for the same countries derived from Vodafone revenue per minute data.
214. You can see that there is very poor alignment between these two sets of figures. Most surprisingly is that the Netherlands is the cheapest of the listed countries on the OECD comparisons, but the Netherlands [

] VNZCOI.

215. This simple comparison makes us think that the OECD figures are not reliable measures of the relative costs of using mobile phones in the listed countries.

Table 4: OECD ranking from most to least expensive for prepay users (May 2007) with prepay ranking from Vodafone revenue per minute (YTD January 2007)

[illegible]

216. Even without such sophistication, we can see that the Teligen results must be missing something important because the relativities between Vodafone and Telecom results do not make any sense.

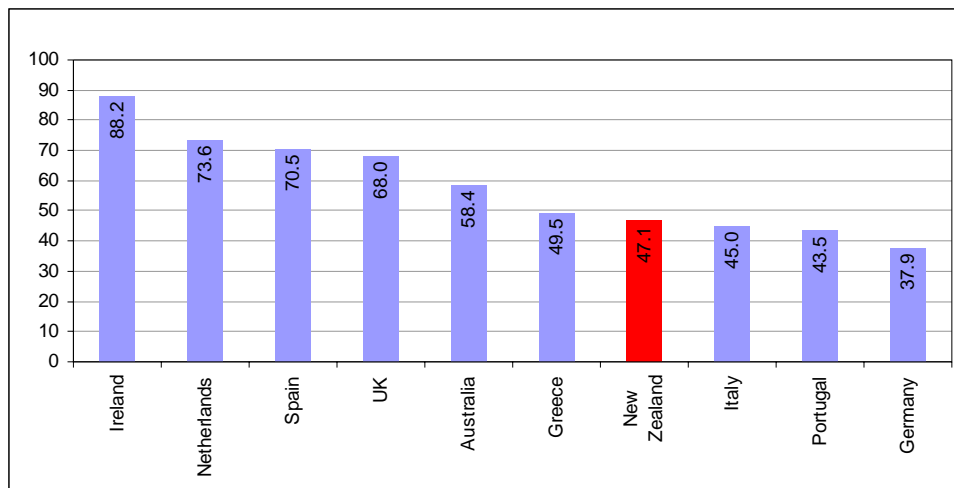
- In the May 2007 results Telecom's cheapest plan for each user are between 32% and 64% more expensive than Vodafone's cheapest plan for each user.
- If this is true, it is very hard to square with the fact that Telecom continues to secure the lion's share of new mobile connections each quarter.

Revenue per user is falling

217. Vodafone New Zealand's monthly customer ARPU is in the lower third of Vodafone Operating Companies.

218. Around the developed world, ARPUs are in decline. ARPUs in New Zealand have fallen 12% from June 2004 until June 2007.

Figure 1: ARPU in New Zealand compared with other Vodafones (June 07, \$NZ)²⁴

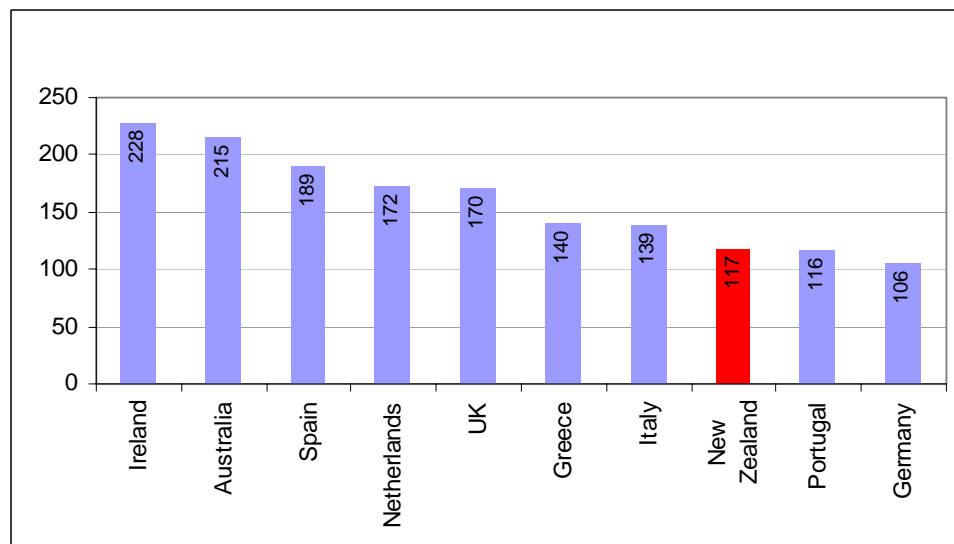


Despite falling revenue per user, usage per customer is growing quickly

219. It is well known that, by comparison with other countries, New Zealand mobile voice usage is low and New Zealand's SMS usage is high.

- The chart below benchmarks Vodafone New Zealand customer's monthly voice usage (incoming and outgoing) compared with other Vodafone Operating Companies. This is calculated by dividing total network minutes by average customer base for the period.

Figure 2: Mobile use in New Zealand compared with other Vodafones (Vodafone average minutes of use per customer per month, June 2007 data)



²⁴ ARPUs converted to NZD using long run average exchange rates of 0.3395 GBP, 0.5150 Euro, and 0.8640 AUD.

220. As the Commission and NZ Communications note (paragraphs 217 and 220) usage on Vodafone has been increasing quickly.

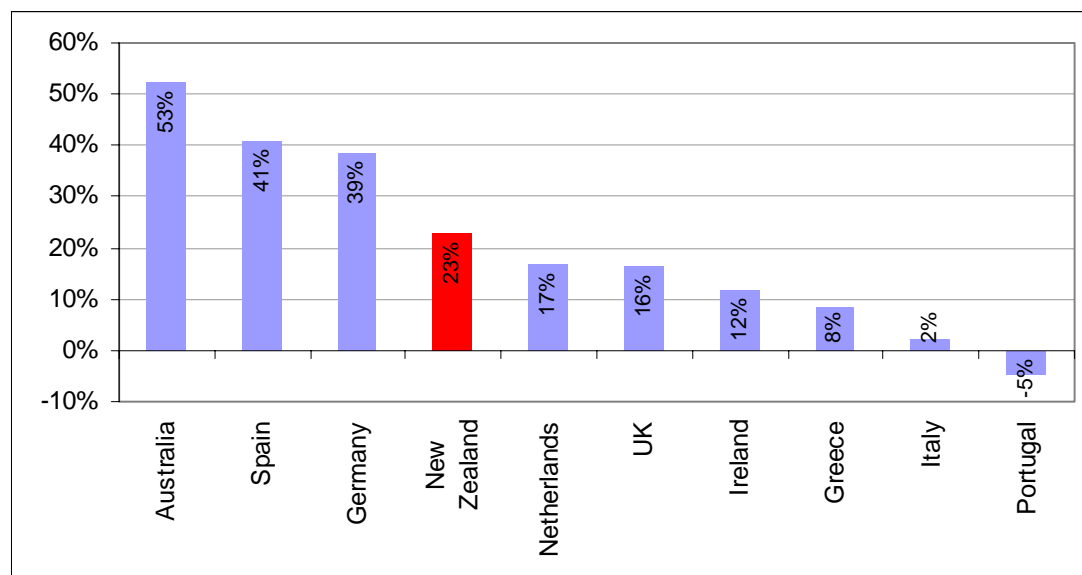
- The average Vodafone customer talked for [] VNZRI minutes on outgoing calls in April 2006. By April 2007 the comparable figure was [] VNZRI minutes, an increase of around 35%. We expect outgoing minutes to reach [] VNZRI per customer by April 2008, more than twice the level of two years before.²⁵
- The chart below illustrates that mobile usage on Vodafone (incoming and outgoing) has increased 23% over the past three years. This is calculated by dividing total network minutes by the average customer base for the period.

221. This rapid increase in minutes is a direct result of our strategy of increasing the value of mobile in order to grow revenues, and target fixed to mobile substitution.

- The increase in minutes has so far been driven by offers to Prepay customers. In April 05 the average prepay customer made [] VNZRI minutes of outgoing calls. By April 06 the number was higher, at [] VNZRI minutes. But in April 2007 the average was [] VNZRI minutes, three times the level of two years before.

222. Falling ARPU's and rising minutes indicate that customers continue to get a better and better deal on mobile.

Figure 3: Change in mobile use in New Zealand compared with other Vodafones (average minutes of use per month per customer, % change June 04 to June 07)



²⁵ This has an implication for the number of minutes the Commission should assume in its modelling of an entrant's business case. We cover this point further below.

Churn is comparable with markets with many more networks

223. We have explained in the past that churn is much higher in New Zealand than would be expected from a two player market. And this is despite the fact that customers have until recently had to change both their number and their handset to switch between providers.

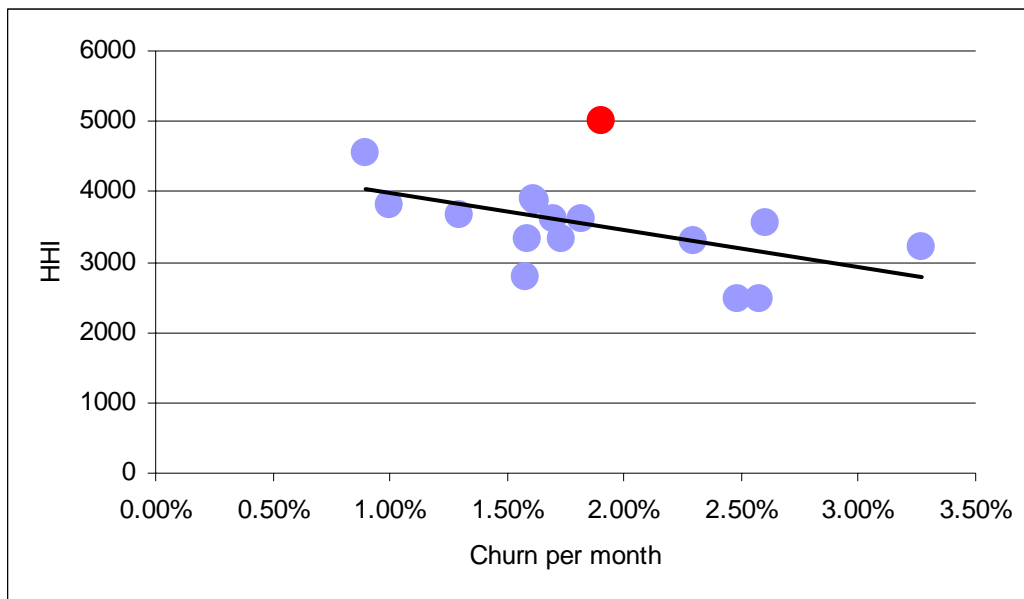
224. The chart below illustrates the relationship between churn and HHI across a number of markets. New Zealand is indicated in red.

- It shows that there is some correlation between the two variables (correlation coefficient -0.42) which indicates that churn could increase with competition in NZ.
- However, churn in New Zealand is already more than would be expected from a two player market.

225. These figures suggest suggests that customers find it fairly easy to switch their mobile operator, which is a good indicator that the market is competitive.

226. In addition, these figures predate mobile number portability and Telecom's switch to W-CDMA, which might be expected to make switching networks even easier.

Figure 4: HHI compared with churn in New Zealand and other countries



New services and technologies are comparable with anywhere in the world

227. The wireless and mobile investment story in New Zealand is very encouraging: in fact, it is not going too far to say that wireless investment and innovative services are the shining light in an otherwise rather dismal telecommunications investment picture in New Zealand.

228. Vodafone New Zealand is doing better than most operators in the OECD in terms of putting its customers' money back into services.

- Recent OECD figures OECD say that telecommunications firms around the world invest on average 15% of their revenues back into their networks.
- The comparable figure for Vodafone New Zealand in the last five years is 17%, suggesting that mobile investment in New Zealand runs at relatively higher levels than other places in the OECD.

229. The results of this investment and investments by others are clear. The rate of innovation in New Zealand wireless services seems comparable with anywhere in the world.²⁶

- Telecom, Woosh, CallPlus and Vodafone are all building wireless broadband networks, and prices are amongst the lowest in the world. Telecom is at the forefront of CDMA2000 technology and Vodafone is at the forefront of UMTS.
- New Zealand was the ninth country in the world to benefit from an HSDPA network rollout, and the first commercial 3.6 Mbps HSDPA network anywhere outside of Japan. We have plans to continue to increase the coverage and speed of our network.
- Telecom has announced a new nationwide GSM network, and an urban W-CDMA network build. NZ Communications has indicated that it will also build a new nationwide W-CDMA network.
- CallPlus is said to be planning a nationwide WiMax network from its base in Whangarei (although this plan seems to have changed somewhat since LLU was announced), and Woosh continues to expand its 3G network and customer base, presumably in the expectation of moving to WiMax technology at some point.

Competitive conditions in the retail mobile market look good

230. From our review of the evidence, competition in the New Zealand mobile market looks pretty good. Low and falling prices, growing usage, high churn, and new networks and services are all good evidence of a competitive market.

231. The market will only get more competitive.

- Telecom and NZ Communications are both about to build GSM networks, which will change the landscape.

²⁶ We here combine together wireless broadband and mobile technologies. How wireless broadband service and mobile services intersect in terms of market definition remains unclear.

- In addition, TelstraClear has just announced that it will re-enter the mobile market later on this year as an MVNO on Telecom's network (apparently with a thicker MVNO model than its previous relationship with Vodafone).
 - Plus, as the Commission notes (paragraph 148), we have three thinner MVNOs entering the market on our network from October.
232. The only evidence of a competition problem that we see in the Commission's draft report is the OECD retail price figures for voice calls. In our view this is not the best evidence, since it ignores many offers that are important to New Zealand mobile customers, like capped calling and text offers. And alternative data, like Vodafone's revenue per minute calculations, show that voice prices are comparable with other countries and falling quickly.
233. As we have said above, it would be helpful if the Commission could state clearly what it would need to see before it could conclude that competition in the mobile market was not limited. At present we find that no matter how positive the story, the Commission seems to find a way to argue that regulation could be expected to help.

VIII Impact analysis of amendments – roaming

234. In this section we provide our thoughts on the Commission's assessment of the impacts of regulating the price of roaming, aside from the question of impacts on investment incentives and the impact of regulation on entry that we have covered earlier.
235. We have some suggestions for how to make the modelling of the new entrant's business case more realistic. We also have some concerns with the way the Commission estimates what would happen to roaming prices in the absence of regulation, and what the appropriate regulatory response is.

The counterfactual should be the Undertaking terms

236. The Commission states that it will not use the Undertaking terms as the counterfactual because it needs to determine whether regulation should extend to roaming prices before considering how best to implement that regulation (paragraph 178).
237. This is fine in theory, but in practice using rates from old agreements does not reflect what would be offered to an access seeker if the Commission decided not to regulate.
238. The best reflection of what would be offered to a new entrant for roaming are the terms in the Undertaking. And this must therefore be the counterfactual.
239. If the Commission doubts that we would actually offer the Undertaking terms if the Commission did not regulate the price of roaming, we would be happy to consider a standing public offer outside of the regulatory process.

The Commission's estimates from the 2005 agreement are too high

240. Even if the Commission does continue with its existing approach to the counterfactual, it needs to correct its figures.
241. The Commission reviews a range of possible values (paragraphs 170 to 179) and settles on a range bounded by a rate that TelstraClear suggested and we agreed in 2005 (and then offered to Econet), and a rate that we agreed with TelstraClear in January 2007.
242. There is one important factor missing from the Commission's analysis.
- The rates that were agreed with TelstraClear in 2005 (and offered to Econet) fell over the six year life of the agreement. The starting rate for voice was [] VNZRI cpm per leg, but by the end of the

contract the roaming rate was about 40% lower at [] VNZRI cpm per leg.

243. We suggest that, in line with the method the Commission uses for its calculation of MTR rates in the Covec model (paragraph 227), it calculates the average of these six year rates if it uses them in the counterfactual. That average for voice services is 26 cpm.

244. This would mean a counterfactual roaming rate in the range [] VNZRI to 26 cpm, as compared with the Commission's current [] VNZRI to [] VNZRI cpm.

Table 5: Per leg/text/10kb roaming rates from 2005 roaming agreement with TelstraClear (cents)²⁷

Year	1	2	3	4	5	6	Average
Voice	[26
SMS							9
Data]	1

VNZRI

245. We might question reliance on these figures in any case.

- Roaming prices have been falling over time, as access seekers have become more credible in their entry plans.
- In addition, the Commission's process for deciding whether to investigate the regulation of roaming prices, as well as the investigation itself have had an impact on commercially negotiated roaming prices that will not be unwound.

246. The Commission also refers to roaming rates we offered to Econet since 2002 in paragraph 171. The Commission does not seem to put much weight on these estimates and that is appropriate:

- A search has not revealed the documentary evidence of the rates that we actually offered Econet before 2005. So we have not been able to check the provenance of the number in paragraph 171.
- That said, we would be surprised if the rates we offered would generate genuine price squeeze concerns. Mr Edwards is not well-known for his ability to dispassionately convey the facts of an issue. Typically he debated these issues publicly by using the price for a two-legged roaming call (a call from an Econet customer roaming on our network to another Econet customer roaming on our

²⁷ Note that the data price in this table is the rate per 10kb rather than the rate per MB that has become more standard since 2005.

network), and then maintaining that the high rate was both greater than retail prices and evidence that the terms were unreasonable.

The relationship between retail prices and roaming prices is not straightforward. It is influenced strongly by the extent of an entrant's network build and its customers' calling patterns. Comparing the cost of a two-legged roaming call directly to a retail price is highly misleading.

The factual should be a higher price

247. The Commission is wrong to suggest a cost-based price as the factual. We have covered this point earlier. Here we only repeat our view that regulation at the minimum possible rate (i.e., TSLRIC) will deter mobile investment. If New Zealand had a problem with over-investment in telecommunications then cost-based prices might be sensible, but that is not the most pressing policy concern.
248. We have one other small point on prices. In paragraph 185 the Commission states that the new OfCom rates are lower than the prevailing rates before the extension of regulation.
249. This seems to be an oversight. We do not think that termination rates in the UK figures have been reduced by OfCom's most recent proposals.
- Table 9.6 in the final Ofcom report²⁸ reports the new 2G/3G rates, but they are in 2006/07 prices. Once inflation is built in, the lowest regulated rate is rising slightly over time.²⁹ This is assuming that the Commission intends to use nominal MTRs to do its benchmarking, which has been its consistent practice in the past.

The modelling needs to capture some other complexities

250. The Commission changes some of the values in the Covec model to values that, in its view, present a more accurate rendition of New Zealand Communication's actual entry strategy.
251. In general the Commission's work is updating values that are uncontroversial (like market size, ARPU or MTRs). We have just a few additional comments.

²⁸ Page 185 of http://www.ofcom.org.uk/consult/condocs/mobile_call_term/statement/statement.pdf

²⁹ OfCom's inflation expectations are 3.1% in the first year, and 2.8% in subsequent years (see paragraph 9.239).

Entrants appear to have very different cellsite costs

252. The Commission has changed the cellsite numbers to values that NZ Communications estimates to cover its first three cities. This has the effect of reducing the costs of entry.
253. But the Commission does not seem to have updated the costs of the cellsites themselves to reflect NZ Communication's lower costs. This seems important because entrants say that their network is much cheaper than ours.
- In paragraph 362 Woosh estimates that its 3G cellsites cost less than half of ours. It also presents an estimate that our 3G cellsites should cost less than half of what they do.
254. Such a low cost build could dramatically reduce the estimated costs of entry in the model. If the costs of entry do change substantially, then this could affect the breakeven market shares, and therefore the argument about the impact of lower roaming rates on investment incentives.
255. In addition, as outlined previous, NZ Communications intends to expand its coverage to 80% of the population within the first five years of operation. This should be built into the model.

There may be questions about network quality

256. The Commission refers to the use of spectrum and its impacts on entry costs in paragraphs 208 to 212.
257. A large part of the cost saving here seems to be to do with having a smaller number of 3G sites than Vodafone to cover the same area.
258. We have two points on this, both of which suggest that the NZ Communications numbers may be too low:
259. It is much more difficult to build a network than a desktop study suggests. Our high level design model under-estimates the number of sites needed by about a third.
- Our high level design model estimates that we would have to build [] VNZRI 3G sites at 2100 MHz to cover Auckland.
 - We currently have [] VNZRI sites and plan to increase the site count to [] VNZRI to cover the modelled area.
 - It may be that NZ Communications will run into the same difficulty, the implication being that the site counts they are proposing are on the low side.

Table 6: 3G coverage site counts in model design and reality

City	Design	Reality	Model underestimate
Auckland	[43%
Christchurch			29%
Dunedin			11%
Hamilton			39%
Wellington			18%
Sum] VNZRI	36%

260. In addition, quite a large proportion of calls drop back to 2G even on our 3G network. In 2005 in Auckland, for example, [] VNZRI of calls that started on 3G were carried on our 2G network.

261. If it is using fewer 3G coverage sites and not offering 2G services, NZ Communications is at risk of offering lower quality services to customers. This kind of impact is not accounted for in the Commission's analysis.

- It may be that NZ Communications will launch both 2G and 3G services in order to protect its call quality for 3G customers.

Usage needs to be looked at more closely

262. The Commission has changed Covec's assumption on mobile usage to 1,160 minutes per customer per year and increasing by 5% per annum.

263. We explain below that the starting number of minutes the Commission is assuming may be too high, given Telecom's customers' lower voice minute usage. There are also some difficulties with predicting growth in usage over time: although our estimates are much higher than 5% per annum given our strategy to boost usage by increasing the value of mobile, the growth rate in the past three years has been only 2% per annum.

The Commission needs to consider usage by Telecom's customers

264. Voice usage by Telecom's mobile customers is much lower than Vodafone's. The Commission's figures need to take into account total market usage, just as they take into account total market ARPU.

265. The figures below show total minutes of use per customer for June quarters in the last three years.

- The average figure weights Telecom and Vodafone data equally. An alternative approach would be to weight by market share in the relevant quarter. The annualised figure simply multiplies the quarterly figure by four.

Table 7: Quarterly total minutes of use per customer over time

	June	June	June	June	Change	CAGR
--	------	------	------	------	--------	------

	2004	2005	2006	2007		
Vodafone	286	283	284	352	+23%	+7%
Telecom	213	205	188	177	-17%	-6%
Average	249	244	236	264	+6%	+2%
Annualised	997	975	944	1,058	+6%	+2%

266. These numbers suggest that a starting figure of around 1,060 minutes would be reasonable (rather than the Commission's figure of 1,160) with future growth of 2% a year (rather than the Commission's 5%).

267. That said, we expect total minutes per customer on our network to increase sharply over the next five years as we continue to increase the value of mobile.

268. Although we obviously have no figures on expected growth in usage by Telecom's customers, a continuation of previous trends would see their usage falling at around 6% a year.

An entrant could well have a higher proportion of minutes on its own network

269. The Commission states that it does not want to speculate about the impacts of new mobile entry on the retail mobile market (paragraph 232). We can understand its nervousness in this regard. There are many different possible entry strategies.

270. The Commission does seem confident enough to speculate that an entrant will have lower prices and therefore higher voice usage, although offset to the extent that it attracts prepaid customers with lower usage (paragraphs 218 and 219).

- We would caution against making too many assumptions about entry strategy. 3 in Australia was the last operator to enter, but focuses on content and applications and has a very low proportion of prepaid subscribers.

271. That said, we would expect an entrant to encourage its customers to make on-net calls, as do all other operators.

272. In terms of estimating the size of this effect, our customer market share is 53% in June 2007, but on-net minutes made up [] VNZRI of our total minutes in that month. This suggests a ratio of [] VNZRI might be appropriate and should be built into the model.

273. Given the obvious cost and customer acquisition advantages of offering sharp in-coverage deals, we might also expect an entrant to focus its marketing activity on areas where it has built coverage. This would reduce the entrants total roaming costs and also reduce its sensitivity to the roaming rate. This kind of impact also needs attention from the Commission.

There are some costs to roaming regulation

274. The Commission's report does not refer to any costs of regulation. We find this surprising since regulation is typically thought to have a number of costs.

- We have already made the point that the Commission should consider carefully the impact on investment incentives of regulating roaming rates. There are a range of possible impacts from regulation, particularly from regulation of services and networks that have not yet been built.
- The Commission would also normally estimate or at least acknowledge direct and indirect costs from regulation. In this case the indirect costs of delay and uncertainty are particularly important, since the Commission's decisions will directly affect network investment decisions of every mobile operator, and delay in settling the regulated terms will affect firms' ability to come to commercial arrangements.

IX Impact analysis of amendments – co-location

275. In this brief section we look at the Commission's analysis of the impact of regulation the price of co-location. In our view the Commission needs to do more to explain its views on what regulation of co-location pricing would achieve, particularly because of its conclusion that co-location is subject to limited competition.

The Commission's conclusion on co-location is doubtless correct

276. We certainly agree with your conclusion that there is no need to regulate co-location prices.

- In fact the Commission now seems to have come to the same view that we have expressed so many times in the past, i.e., that regulation of prices would be difficult because the characteristics of individual sites are so varied.
- We also think that co-location regulation makes little difference to the entrant's business case, a fact that the Commission also seems to recognise now (paragraph 273).

But there are inconsistencies in the Commission's analysis

277. The Commission needs to do more to specify how it can justify not regulating the price of co-location when it says that competition is so limited in its narrowly defined co-location market.

278. The current approach (of arguing competition is limited but that price regulation will not help) suggests that competition will always remain limited in the co-location market. If this is the case, it would be helpful to have this clearly stated.

279. In our view the Commission is wrong about market definition and wrong about competitive conditions, but if the Commission concludes that the market situation is so bad, then it needs to be clearer on its reasons for not intervening.

X Service specification

280. In this section we present our proposed service specification, and explain how it differs from the Commission's.

281. Before we do that, there are some other minor issues to cover.

There is little risk around Telecom/Vodafone differentiation

282. In paragraph 417 the Commission seems to raise some concern with having Vodafone differentially regulated from other mobile operators for roaming.

283. We do not see big risks from differential regulation.

- We do not think that there will be any need to regulate other operators at all if the Commission recommends acceptance of Vodafone's Undertaking.
- And we would be happy to take roaming business from other operators on the terms in the Undertaking.

Application of the initial coverage requirement needs clarifying

284. There is some lack of clarity around whether an operator needs to have built a cellular mobile network to get access to the roaming service.

285. We understand that the Commission is intending to enable access seekers who have built 10% population coverage or 100 sites with any technology to roam at regulated rates on a mobile network.

286. The Commission may want to consider the definition of "site" a little more closely.

- The requirement in our Undertaking is 100 macro sites, which indicates a reasonable but not especially substantial commitment to building. We have around 900 macro sites in our network.
- We are unclear how to define this requirement for WiMax or WiFi operators, since we have less familiarity with those technologies. But it certainly seems to us that to require a WiFi operator to have built 100 hot-spots is a rather less demanding requirement than a requirement for a WiMax or cellular mobile operator to have built 100 sites.
- Equally we are unclear how the sunrise requirement applies to the "fixed-line operators interested in other wireless technologies" the Commission refers to in paragraph 464.

Value-added services seem to have been omitted

287. The current service specification in the Act specifically excludes access to value-added services, like voicemail, Vodafone Live! or other content services, as part of the roaming regulation. This exclusion does not appear in the Commission's draft service specification.
288. We assume that the Commission does not intend to regulate access to value-added services as part of this regulation.
- There is nothing in the Draft Report on this point at all.
 - There is no justification in theory or practice for regulation of value-added services.

Proposed service specification

Item	Text	Difference from Commission's proposal
Description of Service	<p>A service that enables an end-user who subscribes to a network operator's (operator A's) cellular mobile service to access services (except value-added services) generally accepted internationally as second generation cellular mobile services that are provided by another network operator (operator B's) within the area where operator B has a cellular mobile network but which is outside the coverage of operator A's cellular mobile network, except:</p> <p>a) in the cities of Auckland, Wellington, Christchurch, Hamilton, Dunedin and Tauranga; and</p> <p>b) in those areas where the service provider has decommissioned its 2G coverage and replaced it with 3G coverage, where for those particular areas only, the service provider is obliged to offer mobile service to access services (except value-added services) generally accepted internationally as third generation cellular mobile services.</p>	<p>Clarifies that it is a cellular mobile service only</p> <p>Excludes value-added services</p> <p>Excludes roaming in New Zealand's 6 major cities (where we expect building is economically viable)</p> <p>Obliges access provider to offer 3G roaming only in those areas where it has decommissioned 2G coverage and replaced it with 3G coverage</p>
Conditions	All of the following	

	a) The access seeker must not already have an agreement that provides for national mobile roaming with any mobile network operator in New Zealand	
	b) There must be no separate determination (whether pending or existing) regarding roaming onto a cellular mobile network other than the cellular mobile network in respect of which the access seeker seeks access	Clarifies that it is a cellular roaming service only
	c) The access seeker must have rolled-out a cellular mobile network that comprises 100 macro sites or covers no less than 10% of the population, whichever is lower	Clarifies that it is a cellular roaming service only Specifies that sites are "macro" sites
	d) The cellular mobile networks of both the access seeker and the access provider must be technically compatible and be able to interconnect	Clarifies that it is a cellular roaming service only
	e) Access seekers with a total New Zealand mobile market share greater than 25% in the mobile services market cannot roam in New Zealand cities.	
	f) The Commission must have approved a plan for the access seeker. That plan must include the provision for roll-out (including the establishment of roll-out milestones to be met by the access seeker) of a new cellular mobile network that covers 60% of the New Zealand population within 5 years.	Includes a rollout requirement
	g) In approving an access seeker's roll-out plan, the Commission must be satisfied that the access seeker holds, or will be able to obtain, sufficient radio spectrum rights to enable that operator to complete its roll-out plan.	Requires sufficient spectrum to meet that rollout requirement
Access Provider	Any person who operates a cellular mobile network	Clarifies that it is a cellular roaming service only
Access Seeker	A service provider who seeks access to a mobile service, but who does already have a cellular mobile network that covers 80% or more of	Clarifies that it is a cellular roaming service only Restricts availability to

	the New Zealand population	those who do not already have nationwide coverage
Access Principles	The standard access principles set out in clause 5	
Limits on access principles	The limits set out in clause 6 and additional limits, which must be set by taking the following matters into account:	
	a) Whether the access provider has, for each relevant cellsite within an area, sufficient available capacity to provide the service, taking into account its reasonable anticipated requirements for capacity at that cellsite	Minor wording clarification
	b) All legal requirements and all existing contractual obligations that the access provider has with third parties	
	c) The requirement on the access provider to provide the service to the access seeker will cease on the earlier of- <ul style="list-style-type: none"> i. Any failure by the access seeker to comply with the agreed network roll-out plan, as determined by the Commission; or ii. Any other events specified by the Commission in its determination. 	Clarifies events that lead to termination of responsibilities due to a failure to meet roll-out plans
Initial pricing principle:	Benchmarking against current mobile termination rates in comparable countries.	Uses current termination rates as a simple way to ensure prices are not pushed down too low
Final pricing principle	Retail price minus a discount comprising avoided costs saved This retail price must then be de-averaged based on the relative network costs of the service provider in different areas	Final pricing principle is retail-minus based with an allowance for deaveraging
Additional matters that must be considered regarding application of section 18:	The Commission must establish roll-out milestones and roll-out thresholds that ensure that the access seeker has strong incentives to roll-out its national cellular mobile network in an efficient and timely manner.	Inserts obligations relevant to the rollout requirement

XI Comparison of proposals

289. In this section we sum up by briefly comparing our proposals with the Commission's. The following table compares what we propose for regulation with what we propose in the Undertaking and what the Commission is suggesting in its Draft Report.

Table 8: Comparison between Vodafone proposals and the Commission's

Issue	Commission Draft Report	Vodafone Undertaking	Vodafone proposed regulation
Scope of regulation	Nationwide	Nationwide	Only in areas where building is not economically viable
Initial pricing principle	Benchmarking against cost-based MTRs for voice Not clear for SMS and data services Maybe de-averaged	Set prices based on estimates of what the Commission would consider reasonable, and then de-average	Benchmark against current MTRs and then de-average
Final pricing principle	TSLRIC	Not applicable	Retail-minus price and then de-average based on relative costs in different areas
Technologies	All existing and future mobile technologies provided by current mobile operators	All technologies but not till 3 years after commercial launch	2G plus 3G in areas where 2G is not available
Access seekers	Any firm (including existing operators and non-mobile operators) that has built 10% coverage or 100 sites	Any firm that has built 10% coverage or 100 macro sites	Only cellular mobile operators who have built 10% coverage and not more than 80%
Rollout requirements	No rollout requirement	No rollout requirement	Rollout to 60% of population within five years

XII Answers to questions

Question 6.1

- a) What sort of credit cover should access seekers be required to provide?
- b) Is \$20,000 per month enough protection against credit risk?
- c) If not what would be an appropriate access fee?

290. We explain this point in the letter that accompanies our revised Undertaking.

Question 6.2

- a) Should call handover from the access seeker to Vodafone be subject to separate commercial agreement?
- b) Should there be call handover from the Vodafone network to the access seeker network?

291. We explain this point in the letter than accompanies our revised Undertaking.

Question 7.1

How does removing the restriction on the access seeker definition affect the access provider's capacity to provide roaming?

292. We do not understand what this question means. It is not clear to us what impact having more access seekers would have on the access provider's capacity to provide roaming.