

Tuesday, 18 September 2007

Thomas Forster
Manager, Telecommunications Branch
Commerce Commission
PO Box 2351
WELLINGTON

Dear Tom,

Cross submission on Commission's Draft Roaming and Co-location report

1. This letter is Vodafone's cross-submission on others' submissions on the Commission's Draft Report on regulation of roaming and co-location.
2. We cover three main issues in this letter:
 - Incentives for investment in mobile networks – This is the key issue for the investigation. There are many ways for the Commission to encourage building of mobile networks, including through pricing, rollout requirements or restricting the scope of its regulation. There is some support from submitters for many of these mechanisms from mobile operators, particularly a rollout requirement.
 - How to set prices – We do not think that the criticisms NZ Communications makes of de-averaged pricing have any real merit. We also consider the use of benchmarking, and look at how roaming prices relate to retail mobile prices, both issues raised by NZ Communications' submission.
 - Access to services – We see nothing in the submissions from Kordia that could support the Commission's view that WiMax operators need nationwide coverage to attract customers from mobile operators. And we continue to object to access for Telecom to regulated roaming on any network for any technology when it already has nationwide coverage.
3. Our submission also includes a short report from Covec looking at how an entrant's exposure to roaming charges changes with its market share and network build.
4. We will also shortly make a binding public commitment for the next five years to offer roaming and co-location on the terms of our Undertaking regardless of whether the Commission regulates roaming. This is because the Draft Report suggests that the Commission is unconvinced that it should use the Undertaking terms as the counterfactual. This enforceable public commitment should put its mind at ease.

Incentives for investment in mobile networks

5. As we noted in our submission on the Draft Report, we understand that the purpose of roaming and co-location regulation is to encourage the building of more mobile networks.
6. Telecom points out (paragraph 11 of its submission) that the Commission has various means at its disposal to help achieve this goal including:
 - Pricing – As we have argued, lower prices for roaming will mean less network building by all parties. NZ Communications seems to be arguing for exceptionally low prices, which would improve its bottom line but does not seem likely to encourage it to build an extensive network.
 - Rollout requirements – If the Commission sets a 10% minimum buildout threshold but has no rollout requirement beyond that point, then it may generate more mobile entry but little actual building as entrants roam on whatever networks are available beyond that 10%. We note that all three existing and potential mobile operators agree with a rollout requirement.
 - Restriction to core technologies – Telecom supports our proposed restriction on access to roaming for new services for a period after their launch on the host network in order to avoid deterring innovation. We note that the practical difference between our Undertaking proposal and the Commission’s regulatory proposal on this point is actually very limited, since the proposed three-year delay on access for roaming operators to 3G services will expire in August 2008.
7. We would also add that the Commission can choose the geographical extent of roaming regulation. In our submission on the Draft Report we suggested that roaming only be regulated outside the six major cities, where we might expect that new mobile networks are economically viable. This will encourage building in those areas.

How to set prices

Averaged or deaveraged

8. NZ Communications argues against de-averaged prices in its submission (paragraphs 5.8 to 5.24).
9. We respond to each of its points below.

Relationship to retail pricing

10. NZ Communications argues that geographic de-averaging does not reflect retail pricing arrangements at present, and could lead to firms either de-averaging their retail prices or not offering services in high-cost areas to the detriment of consumers (paragraphs 5.9 to 5.11).
11. We would not expect geographically de-averaged roaming rates to impact on the structure of retail mobile prices.

12. We would expect a roaming entrant to try to attract customers who lived and worked in areas that it already covered in order to minimise its roaming bill. But it would do this regardless of whether prices were de-averaged or not.
13. An entrant might also choose to charge customers more for using services while roaming, but this hardly seems inevitable. As demonstrated by the data in the Undertaking, we already face average costs that vary across our network and we do not de-average retail prices. All that de-averaging does is pass on the existing cost structure into roaming prices.

Consistency with approaches in other countries

14. NZ Communications maintains that regulators “throughout the world” have regulated the price of roaming services (paragraph 5.12) but that no regulator has set de-averaged prices.
15. We are not aware of roaming having been regulated in many countries at all. We are certainly not aware of any place (except perhaps Malta) that has actually set regulated roaming prices. We note that the Commission has not mentioned in its Draft Report any roaming prices from other regulators.
16. NZ Communications refers to the experience of de-averaging UNE prices (paragraphs 5.13) but maintains that this is done in order to lower urban costs for competitors.
17. We find these comments perplexing. The purpose of geographic de-averaging is not to lower urban costs per se. The purpose of de-averaging is to ensure that prices reflect costs. It both raises roaming rates in areas with low traffic and lowers roaming rates in areas with high traffic. This creates efficient building incentives.

Complexity and difficulty of implementation

18. NZ Communications maintains that geographic de-averaging would compel the Commission to permanently monitor and maintain prices, and that the system would be extremely costly and difficult to manage and maintain (paragraphs 5.16 and 5.17).
19. In fact, geographic de-averaging is very simple. Vodafone has undertaken to recalculate the prices payable by an Access Seeker when that Access Seeker adds a new exclusion zone and/or in accordance with an annual price review (there being no price adjustment if no agreement is reached). An access seeker may at any time also request an independent audit by a financial expert of Vodafone’s pricing calculations, so the resource demanded of the Commission on an on-going basis is likely to be minimal.¹
20. Implementation is also very simple. Our Undertaking proposal has just one price for all roamed traffic regardless of location. The rate is set as the average of the rates for unbuilt areas. There would be no need to bill each call or portions of

¹ Note that the pricing update can only change the shape of the de-averaging cost curve that is applied to the underlying prices. The underlying prices themselves do not change.

calls at different rates. We have deliberately designed this system to involve the minimum possible complexity for billing.

21. Our proposal is far simpler than calculating TSLRIC. This is a key advantage of the Undertaking over the Commission's regulatory proposal, especially given the view that TSLRIC would need to be recalculated periodically to ensure that the cost calculated appropriately reflected the costs of roaming in areas that remained unbuilt by the entrant

Geographic de-averaging and efficiency

22. NZ Communications claims that geographic de-averaging does not increase efficiency (paragraphs 5.18 to 5.21). In particular this is because costs do not vary across a mobile network.
23. On its face this is a very bold claim, because the evidence underlying our Undertaking and plain common sense suggests that costs do vary across our mobile network.
24. This may be partly explained by the fact that NZ Communications appears to be referring to incremental costs (see in particular paragraph 5.14).
 - If this is the case, then we agree with NZ Communications: incremental costs may not vary much across a mobile network. Certainly the additional costs to serve an additional customer or carry an additional minute of traffic are likely to be low at any point on the network.
25. But incremental costs are not the point. TSLRIC is an average cost approach, and average costs do vary across the network quite markedly because, as demonstrated by our de-averaging data, traffic varies quite markedly across the network.
 - Although low traffic areas may require fewer cellsites because they carry less traffic, this effect is far outweighed by the low loadings of those cellsites, and so the overall impact is that average costs vary quite dramatically across areas.
26. Telecom seems to recognise this in its submission. It seems to support a geographically de-averaged approach, or an adjustment to TSLRIC over time as an entrant builds out its network (paragraphs 27 to 39).

Preference for a rollout requirement

27. NZ Communications argues that, if there is any problem with averaged prices, it can be solved with a rollout requirement (paragraph 5.22).
28. We agree that a rollout requirement is a good idea for mobile operators. We suggested a 60% requirement over the five year regulatory term in our submission on the Draft Report.
29. We do not think that this is a solution to the issue of prices reflecting cost on its own, however, because there will always be the question of how to set prices for the areas that an entrant has not yet built and may not ever build. We

propose both a rollout requirement (to encourage investment by an entrant) and de-averaged prices (to ensure that roaming prices reflect costs for the places the entrant chooses to roam).

Path of prices over time

30. NZ Communications also argues for roaming rates that fall as buildout progresses as a way to encourage an entrant to build further (paragraph 5.23).
31. The trouble with this proposal is that roaming pricing would bear no relationship to costs, which rise in low traffic areas. The host operator would end up subsidising the entrant and this would impact on its ability and incentive to provide a network for the entrant to roam on in the first place.

Conclusion on pricing

32. We remain of the view that geographically de-averaging based on costs is the best way to set roaming rates. It will help align costs and prices and support building by entrants who do not wish to build a nationwide network.

Benchmarking

33. There seems to be fairly general support for benchmarking as an initial pricing principle. There is also a need to estimate at this point in the investigation what rates will be under regulation in order to enable regulation and the Undertaking to be compared with each other.
34. The roaming prices that need to be benchmarked are for voice, SMS and data, and for video calls if 3G is included.
35. The Commission has indicated what it thinks the voice rate should be (14 cpm). It has not indicated its preference for SMS, data or video calling rates apart from raising concerns about the relationship between retail prices and roaming rates for SMS, and about changes in the proposed prices for data roaming in the revised Undertaking.
36. Only NZ Communications has offered any comments on the rates themselves. We review its comments below.

Voice pricing

37. NZ Communications argues for benchmarking of voice rates based on MTR benchmarks (paragraphs 5.1 to 5.5). It mentions rates from Australia, Ireland, Finland and concludes that the roaming price should be 8 cents per minute.
38. We find this surprising for two reasons:
 - The only rate that NZ Communications refers to that is actually anywhere near 8 cpm is the Australian price. But, as NZ Communications surely knows, the ACCC is in fact proposing regulation of termination rates at around 10 cpm. The other rates it quotes for Ireland and Finland are significantly north of this number, and in fact provide more support for the Commission's 14 cpm rate. We also note OfCom's most recent

determination of termination rates in excess of 16 cpm and gently rising over time.

- The ACCC has proposed amongst the lowest termination rates of any regulator in the world. To rely solely on this benchmark would be most unwise.
 - We also note that the Irish 7.99 Euro cpm rate is the end of a five year glidepath, so the rate will not actually be achieved until 1 January 2012.
39. The most recent comprehensive public data we have found on termination rates is from January 2007 from the European Regulators' Group. It has rates for 32 European countries, and an average of around 19 cpm.²
- We have attached this data to this letter.
40. The Commission has indicated that it wants to benchmark against forward looking cost-based termination rates. We think that this would be a mistake because it will discourage firms from building networks.
- The only exception to this would be if the Commission accepts our proposal to regulate only in areas where building is not economically viable. In that case, a de-averaged TSLRIC estimate would make sense.
 - If the Commission is to regulate roaming nationwide, then benchmarking against current MTRs would be more conducive to encouraging mobile infrastructure investment.

SMS and data pricing

41. NZ Communications suggests setting prices based on the lowest possible Vodafone retail price now in the market – less than half a cent per SMS and \$11.84 per GB for data.
42. This is on the basis that unless roaming prices are less than the cheapest possible retail price a roaming operator will face a price squeeze. This is not true.
- One can not compare retail rates directly with roaming rates. An entrant's ability to compete will depend on its costs, on how far it has built out its network, and on its customers' usage, amongst other things. Covoc explains the relationship between an entrant's coverage, its market share and its exposure to roaming charges in its submission.
 - Even if these comparisons were so simple, NZ Communications is using the cheapest possible retail price, e.g., assuming that a customer used exactly 6GB of data in a month on our cheapest broadband plan. As we explained in our submission on the Draft Report, margins on data are healthy when considered across all plans, even with a roaming price of more than 30 cents/MB. And the Commission has defined a broader

² See http://erg.eu.int/doc/whatsnew/erg_07_27_mtr_update_snapshot_for_publication.pdf

market for all retail mobile services, so any price squeeze would need to be considering in that broader market context.

Conclusion on benchmarking

43. We suggest benchmarking against current MTR rates for setting the initial voice roaming price, and against current SMS interconnection rates for the initial SMS roaming price. The case of data roaming is more difficult since benchmarks are hard to come by. The equivalent rate from a European roaming agreement with which we are familiar is around \$1.40/MB.

Access to the regulated roaming service

WiMax and WiFi operators

44. There is no evidence in the submission from Kordia that its WiMax or WiFi services can not compete with cellular mobile services because its service is not nationwide. The barrier to competitive entry in mobile services from a lack of nationwide coverage is the cornerstone of the argument in favour of roaming regulation. Without evidence that customers generally prefer to buy competing services from nationwide mobile operators rather than more localised WiFi or WiMax operators, there can be no justification for regulating in favour of WiFi or WiMax operators.
45. In addition, Kordia's submission refers to mobile internet services as being the key product type delivered by its WiMax and WiFi networks. The Commission has done no analysis to demonstrate whether these mobile internet services are part of the retail mobile market or part of another market (for example, the broadband market). Nor is there any analysis in the Draft Report of the competitive conditions for the provision of these services.
46. Without this analysis having been done, we continue to think that the case has not been made for regulating in favour of WiFi or WiMax operators.

Telecom

47. Telecom argues that it should have access to roaming services when building its W-CDMA network (paragraph 71). Telecom already offers WiFi services but does not offer them nationwide. So by extension, Telecom would presumably support an argument in favour of it having access to cellular roaming to support a WiFi network buildout.
48. This argument is not well founded because, regardless of technology, there is no market failure in the case of Telecom as an access seeker.
49. As we have said in our submission on the Draft Report, if any operator already has an extensive network, using any technology, there can be no justification for regulation of cellular roaming to benefit that operator. Telecom already has a nationwide mobile network, and it therefore does not need access to ours. We note that NZ Communications agrees with us on this point (paragraphs 6.1 to 6.7) although we do not understand all of their reasons.

50. There is a related issue that is raised by the suggested service specification changes from Telecom (paragraph 71).
51. It could be argued that the service description prevents Telecom from roaming on Vodafone's network on the basis that Telecom has nationwide coverage on its CDMA network. The service description limits the roaming service to those areas where an access seeker does not have a "network".
52. However, as Telecom has argued in its submission, the draft service description is ambiguous whether or not the "network" referred to ought to be technology specific (i.e. whether Telecom, in having a nationwide CDMA mobile network, is prevented from being a roaming access seeker on Vodafone's GSM network).
53. If the Commission intends that the wording of the service description be used to exclude Telecom from regulated roaming on Vodafone's network (and vice versa), it would be wise to make this much clearer in its Final Report. We have understood the Commission's draft regulatory proposal to require us to offer services to Telecom.
54. Also relevant to this issue, NZ Communications suggests that an access seeker under our Undertaking should be able to resell roaming or MVNO services on the Vodafone network to Telecom.
55. This appears to be a transparent attempt to use regulation for commercial advantage, requiring Telecom to seek access to our network through NZ Communications. We see no reason that this type of regulation would be required. At risk of repetition, if Telecom has a nationwide mobile network, it has no need of access to a regulated roaming service.

Other issues

Telecom undertaking

56. Telecom says that it would like the opportunity to submit an Undertaking on roaming (paragraph 83). There would be obvious procedural difficulties with such a step. But we note that Telecom could achieve the same effect as an Undertaking at any time by making a standing public offer of the terms on which it is prepared to provide roaming.
57. TUANZ says that Vodafone's Undertaking would not have been an effective alternative to regulation, particularly because of Telecom's GSM network build (paragraph 2).
58. We do not understand why this would be. Accepting the Vodafone Undertaking would mean that there was always an option for a new entrant to roam on the Vodafone network on terms approved by the Commerce Commission. Telecom's GSM network build has no impact on the value of the Undertaking to the entrant at all.

Service specification

59. Telecom raises two points on the specifics of the service specification.

60. We agree with Telecom's first point (paragraph 70) that a better description would restrict operator A to use of operator B's network to deliver operator A's services, rather than suggesting that the services are actually delivered by operator B.
61. As we have stated above, we do not agree at all with Telecom's second point (paragraph 71). If an operator has nationwide coverage with any technology there is no argument for access to regulated roaming.

Inbound international roaming

62. NZ Communications argues that excluding the provision of services to in-bound international roaming end-users would violate the principles of the Act and undermine its fundamental objectives.
63. We disagree. The Commission's draft service specification does not extend to international inbound roaming. The national roaming service description states that it is a service to be provided to an Access Seeker's end-user subscribers:

"A service that enables an end-user who subscribes to a network operator's ... service to use services that are provided by another network operator..."
(emphasis added) (page 98, Draft Report).

64. International inbound roaming is a service ultimately provided to subscribers of overseas mobile networks, and so it does not fall within the current service description. Contrary to what NZ Communications asserts, it is not therefore appropriate for the Commission to place any weight on the effect regulated national roaming may have on end-users of international inbound roaming.
65. In addition, strong policy grounds exist for not extending the national roaming service to international inbound roaming.
 - We think that it is pro-investment to encourage access seekers to build networks in order to secure inbound international roaming revenues.
 - In addition, there is a serious question about whether the Act was intended to enable regulation mandating the provision of services to overseas mobile networks and their end-users. We questioned in our submission on the Draft Report whether the Commission is legally empowered to regulate in favour of inbound international visitors under the terms of the Section 18 purpose statement.

Co-location

66. NZ Communications recites many problems that it perceives with the co-location Code. If the Commission accepts that any of these issues need further scrutiny then it may wish to refer them to the TCF for resolution, as it has the issues about dispute resolution on site costs and cost allocation.
67. NZ Communications, as usual, suggests that the commercial environment for co-location is entirely unworkable. It does not refer to the ongoing negotiations with Vodafone at all. There has certainly been no delay on our part in terms of progressing agreement of the master co-location agreement terms and we

remain hopeful, as ever, of agreeing co-location arrangements with NZ Communications in due course.

68. NZ Communications also suggests that site deployment is much harder now than it used to be (paragraphs 10.3, 10.4 and 10.5). This is not true. We agree that the RMA process is not easy, but it never has been.
- Most mobile sites in NZ were actually deployed under the RMA, which of course came into effect in 1991. Only a very few Telecom sites were in place prior to this, and of course BellSouth itself only came into being about 1992.
 - We actually have a much lower rate of notified RMA applications now than say ten years ago. Less than 5% of our sites are now notified, whereas ten years ago in some areas nearly all sites were notified. Environment Court appeals were not uncommon, and several cases actually went before the Court. Vodafone has not had an active appeal for several years.
69. There are certainly many difficulties associated with building a cellphone network, including getting access to sites, convincing sceptical landlords and managing the RMA.
70. Despite those difficulties, over the past three years Vodafone has acquired around 350 new sites as part of the rollout of our 3G broadband network.

Error correction

71. We note that the table in Section XI of our submission the description of Access Seekers in the "Vodafone Undertaking" column is incomplete. It should read:
- " Any cellular mobile operator (except Excluded Operators) that has built 10% coverage or the number of macro sites equivalent to 10% or more of the number of Vodafone macro sites (Vodafone in September 2007 having approximately 1,000 macro sites)."

Conclusion

72. We continue to encourage the Commission to recommend that the Minister accept the Undertaking. We think that it provides a quicker, easier and more certain set of roaming terms for new mobile entrants than the regulatory alternative.

Yours sincerely,

Hayden Glass
Public Policy

MTRs from the ERG (January 2007)

Country	In NZD ³
Bulgaria	0.35
Estonia	0.32
Slovenia	0.27
Switzerland	0.25
Luxembourg	0.24
Italy	0.23
Greece	0.23
Belgium	0.22
Hungary	0.22
Netherlands	0.22
Denmark	0.22
Iceland	0.21
Poland	0.21
Portugal	0.21
Slovak Rep	0.20
Malta	0.20
Spain	0.20
Czech Rep	0.20
Ireland	0.19
Croatia	0.19
Germany	0.17
Austria	0.17
Latvia	0.17
UK	0.17
Norway	0.17
Turkey	0.16
Lithuania	0.15
France	0.15
Romania	0.14
Sweden	0.14
Finland	0.13
Cyprus	0.04

³ Converted from Euros at 1 Euro = \$1.90 NZD.