SCHEDULE 3 INVESTIGATIONS INTO AMENDMENTS TO THE ROAMING AND CO-LOCATION SERVICES

WOOSH SUBMISSIONS

9 MARCH 2007

EXECUTIVE SUMMARY

1. The New Zealand market has failed to date with respect to co-location and wholesale mobile services, to the detriment of end users.

2. There are plenty of international examples of these services being provided on terms acceptable to both purchasers and vendors.

3. Regulation should seek to mimic those terms.

4. If co-location is to be widespread, the Government needs to address the practical limitations on co-location being imposed by regional councils under the auspices of the Resource Management Act.

BACKGROUND

Regulation Should Seek To Create A Competitive Environment By Mimicking A Competitive Environment

5. New Zealand is unusual in having no competition for co-location and roaming services. In part this is the cause, and in part the result, of a lack of competition. Without significant change to the regulatory environment, we do not believe that the current two player market will change. There has been no significant change to the market in the last decade. However, with the proper level of regulatory oversight, we believe the market will open to competition and over a period of time regulation can be sunset and market forces will prevail in delivering more robust services at reasonable prices to the end users.

6. The regulatory environment should seek to mimic commercial outcomes that are often achieved in other jurisdictions where there is competition for co-location and roaming services.

7. We would encourage the Commerce Commission to engage independent parties with overseas experience to understand the terms on which willing parties would enter into roaming, MVNO and/or co-location arrangements. This will be the best indicator as to what prices and terms can satisfy the needs of both sellers and buyers.

8. We believe the opportunity is for Woosh, who is an established wireless operator with a significant network, to make progress by deploying a WiMAX or similar broadband

access technology which will offer robust, competitively priced services that the current 3G networks do not.

9. As the initial goal of the regulation should be to expand the market from its current two players, the roaming and co-location rules should apply to both of these operators.

10. We would welcome the opportunity to talk to these submissions.

Responses to General Questions Posed In The Issues Paper

11. We do not see that there is a need for roaming and co-location to be linked. They can standalone from a regulatory perspective.

12. The extent to which the regulation reduces barriers to entry depends on the effectiveness of the regulation. For this reason, we have focussed in these submissions on the desired outcomes of the regulation. With both services, if the prices offered for the services are not regulated on the basis of the providers' actual costs, then there is very unlikely to be any significant benefits arising from the regulation.

13. The Issues Paper raises a number of very detailed questions, and options for fine-tuning prices and terms of service. In our experience, the best way to proceed for both access seekers and access providers is for very simple terms to be established. This reflects, by and large, overseas practice, where nuances to pricing and terms are generally kept to a minimum.

CO-LOCATION

14. Woosh now has around 150 communications sites in 4 regions across New Zealand. During this build time we have become very experienced in the processes of site acquisition, obtaining Resource Management Act consents, and co-location. As a consequence of 8 years of such experience, we are convinced that co-location is a prerequisite for any national competition to the existing mobile operators.

15. We have extensive experience in negotiating agreements with the existing operators. While we co-locate on several existing sites, the arrangements we have in place have not facilitated extensive co-location. Confidentiality prevents us sharing the terms of those agreements.

16. In our experience, key elements of any successful co-location will include:

- ***Two willing/reasonable parties***
  Other countries have entities that make good returns from offering co-location services, such as Crown Castle. Their tenants are also successful operators. This shows that there is a commercial model that can suit both the landlord and tenant in co-location services. The fundamental difference between those markets and New Zealand is that, overseas, the host operators are competing to attract tenants and to be a more attractive option than building a new site. To benefit end-users, the regulatory environment must address this difference.

- ***Changes to the Consenting Process Under the Resource Management Act ("RMA")***
  If the Government wishes national competition, widespread co-location is required. The current implementation of the RMA essentially prevents co-location on any widespread basis. If the Government is serious about network competition it needs to intervene in the existing RMA processes. How can this be achieved?

  - Co-located sites need to be taller than sites with only a single set of antennas. However councils have been unwilling to grant anything other than rights to install the lowest of poles, and even that, often at the end of a costly and lengthy notified process.

  - Compounding this, there has been an operator-imposed prohibition to date on co-location where a notified consent may be required – given the need for extra height and two sets of antennas, the notification process will apply to a large percentage of sites.

  - There has been an initiative to develop national standards for the deployment of communication sites. However the development of rules which can apply in all areas have lead to very conservative guidelines being drafted which may be of assistance to an operator with a national network seeking to infill the odd site. They are of little or no practical benefit to a new operator or to parties seeking to develop co-location.

- The Government could intervene to permit existing cell sites to be extended or augmented by an allowance to permit extra antennas to be added. This would give operators seeking to co-locate the ability to achieve co-location without significantly increasing the environmental impact of their installation.

What Are the Key Requirements of Sustainable Co-location

A sustainable economic model

17. Independent overseas site owners have proven that pricing can be set to offer the site owner a reasonable return and the new entrant an ability to grow a profitable business. If there is to be widespread co-location then the price of co-location needs to be no more than the total cost of building new sites.

18. In its draft undertaking, Vodafone refers to the cost of building a site (excluding radio equipment) of $275,000 and proposes that the costs of co-location should be based upon this. However, examples of recent site build costs (excluding radio equipment) are:
    a. $128,000- the average cost of building a Woosh site. This includes; pre-development (network design), site acquisition, planning & construction drawings, RMA costs, AC & DC power provision, mast and cabinet, materials and labour, contingency, and critical sparing. This excludes: site specific radio transmission equipment
    b. $131,165, the cost, assessed by an independent third party, of the cost of building the Vodafone site at Campbell's Bay on Auckland's North Shore. This includes foundations, electrical, mechanical services, general site construction, monopole supply, antenna support structure, construction management, contingency, site acquisition, planning and consent fees, design fees
    c. $131,474 the cost of constructing the Woosh site in Strathmore in Wellington on which Vodafone equipment is co-located. It should be noted that Woosh had anticipated the Access Seeker requirement, and built the mast at small incremental cost with an extension ring incorporated.

    Co-location costs should be cost based, but need to be based upon reality and efficient current practice. It would be inconsistent with the approach taken in all other cost-based assessments if operators were rewarded for inefficiencies.

Workable processes and timeframes

19. In its undertaking, Vodafone has offered co-location on terms as set out in the Industry "Master Co-location Agreement". The industry terms are broadly consistent with the arrangements that Woosh have in place with the incumbent operators.

20. These terms have not lead to widespread co-location. They do not affect the incentives that a willing landlord has and they leave too many loopholes, delays for the host operator – fictitious future needs, fictitious cost estimates, arguments over structural change required. The industry proposed terms are not, on their own, enough. Other incentives are required to ensure that both parties comply both with the spirit as well as the letter of these terms.

Extend the Definition of Co-Location

21. Co-location could also be extended beyond monopoles to rooftop installations. Those have a number of instances where mutual benefits could be gained from co-location – perhaps antenna sharing, power sharing, joint use of equipment rooms, joint use of utilities (backhaul, electricity, etc.). Regulated co-location could be extended to those areas. The pole, in co-location as currently defined, is just one additional element.

ROAMING

22. In many other jurisdictions, there are a number of mobile network operators are falling over themselves to attract roaming and MVNO partners. In New Zealand however, that has not been the case. Given that the New Zealand mobile market is close to saturation and has only two networks (using different technologies), this is unlikely to change. The regulations should seek to create an environment and terms similar to those that would exist in a competitive environment.

The New Zealand Experience To Date

23. There is no significant MVNO market in New Zealand. In part, this is a result of a two network market in which the network operators, unlike in other jurisdictions, have not been courting MVNO or roaming partners. We have reviewed the Vodafone proposed undertaking and the MVNO reference offer it has prepared. We do not believe that either of them would enable an operator to compete with the existing operators.

Who Should Qualify for Roaming?

24. The starting point for the right to roam, should be that any party should be able to seek MVNO or roaming arrangements with the incumbent operators. For an operator seeking to roll out its own network, the incentives will exist to build its own network in order to generate better returns. Artificially constructed incentives will be less likely to achieve the required results. Setting minimum volumes commitments for MVNO operators will ensure that only genuine parties will apply.

Roaming Pricing

25. Before considering the detail of price-setting, some background:
    - Fixed networks are more expensive to build and maintain, so when considering a price per minute for roaming, the regulated price of 1cpm for local termination on fixed networks provides a reasonable benchmark.
    - Wholesale pricing, even when cost-based, must pass some basic tests compared with retail pricing. On-net pricing, where it is significantly more favourable than off-net or interconnect pricing in a saturated market, will effectively prevent any new entrants. On-net pricing should either be prohibited or the wholesale prices should be set so that the new entrant can compete with the on –net prices.
        - An example: On-net pricing has been as low as $2 for 2 hours of Vodafone to Vodafone prepay. With two ends of the call for 120 minutes, this is an effective price of 0.83 cents per minute for each leg of the call. This is for prepay customers who are typically charged a premium. In its Proposed Undertaking, Vodafone is offering an operator who provides billing and helpdesk services, and handset subsidies a price of 21.5cpm!
    - Roaming, internationally, is typically paid for as a per minute rate. MVNO services are typically on a take or pay basis.

26. With this background in mind, Woosh proposes the following arrangements for roaming:
    - Pricing of voice, SMS and data should all be cost-based (TSLRIC).
    - No minimum commitment or take or pay for roaming.
    - MVNO should have a take or pay requirement. This should reflect an opportunity to get established and grow their customer base. With respect to the benefits for end-

users, we note that Virgin Mobile has recently been voted the Best Carrier In Britain despite the fact they have no mobile network.

- Payment by roaming/MVNO partners should be on the terms no worse than those of retail customers (payment on the 20th of the month following etc)
- In its Proposed Undertaking, Vodafone is seeking reimbursement of roaming set-up costs. It is not clear what these are and so it is difficult to comment on them. Clearly, if an incumbent operator did not wish parties to roam on its network then it could use these costs as a significant barrier to entry.

Technical Considerations

27. Inter-network roaming is an essential element of any roaming service. The best opportunity for a new entrant in the New Zealand market is to deploy a technology more advanced than the existing mobile networks, such as WiMAX. If roaming is only available for "me too" services then it will be much more difficult for a new entrant to demonstrate value and attract a significant customer base.

28. In the same vein, the right to roam should not be limited to roaming on the existing 2G networks. Roaming should be permitted onto the 3G networks which have now been deployed for some time.

29. As to whether customers should be permitted to roam in areas where the new entrant has coverage, we should consider the likely outcome should roaming be a competitive service. An existing operator who is seeking to maximise revenue would seek as much traffic as they could get on their network and would not turn down any roaming minutes. The fact that such roaming may occur should also indicate that allowing it would be a good service for consumers.