



10 June 2005

Commerce Commission
PO Box 2351
Wellington
Attention: Chris Abbott

By email

Submission on Number Portability Draft Determination

1. This is a submission by Woosh Wireless Limited in relation to the Commerce Commission's draft determination dated 12 May 2005 on the multi-party application for determination of the functions and standards of "local telephone number portability service" and "cellular telephone number portability service" designated multi network services.
2. Woosh is a high speed, wireless, broadband service provider. The Woosh network is also capable of providing a fixed telephone network service using voice over internet protocol (VoIP) technology. Woosh is currently testing its VoIP service and intends to roll out a commercial voice service across its network later in 2005. Currently we provide service across large areas of Auckland, Wellington and Christchurch. We have an aggressive rollout plan – expanding coverage in these markets as quickly as we can. We have also begun acquisition of leases outside these areas.
3. This submission addresses the Commission's description of a fixed telephone network service in paragraph 68 of the draft determination.
4. Woosh submits that the voice telephone service that it intends to provide is clearly in substance a fixed telephone network service and not a cellular telephone network service, although it is provided by means of a wireless network.
5. While the voice telephone service is "portable" in that customers will be able to move their telephone installations (ie, telephone device and Woosh "gateway") from one place to another by unplugging them from one power supply and plugging them in somewhere else, the service is not a cellular service because:
 - there are no mobile handsets able to access the Woosh network;
 - customers will always need two devices: the wireless device ("gateway") that communicates with Woosh base stations is separate from the customer's telephone device. In fact, Woosh anticipates that most customers, on joining Woosh, will

simply unplug their existing Telecom or TelstraClear POTS phone from the wall and plug it into the Woosh gateway;

- the VoIP technology used by Woosh will provide “quality of service” (QoS) VoIP. Woosh is not aware of any cellular networks either deploying, or with plans to deploy, QoS VoIP.

6. Paragraph 68 of the draft determination states as follows:

*“The Commission considers that a wireless network can provide a fixed telephone network service, provided the end-user is using a local telephone number and the service on the wireless network is limited to calls that are made, and received, in a geographic area that is bounded by a single transmission tower (or cell site). A ‘fixed telephone network service’ does not extend to a service that allows the end-user’s telephone device to perform call hand-over between transmission towers **or to calls made (and received) on that device which require the involvement of more than one transmission tower in the wireless network. Once calls are handed over between cell sites the service qualifies as a cellular telephone network service which is outside the scope of the local telephone number portability service**”.* (emphasis added)

7. This description generally covers Woosh’s network except that, eventually, the Woosh network will be able to perform call hand over between transmission towers for some calls even though the customer is using it as a fixed (for example, plugged in at home) service. This will be an important requirement in providing the voice service to our customers, not to ensure mobility, but rather to give an acceptable level of service quality.

8. Call hand over, even though the customer may be in a fixed position, will be important for two reasons relating to the quality of service:

- if service is degraded from one transmission tower because of, for example, co-channel interference, the customer equipment can be handed over to another transmission tower that can provide acceptable service;
- call hand over allows the network to manage call traffic so that if the number of customers served by one transmission tower becomes so large as to degrade the service, some of those customers can be handed over to another transmission tower with more spare capacity.

9. Woosh supports the Commission’s endeavours to find a meaningful way to distinguish between a fixed telephone network service and a cellular telephone network service. However, the Commission’s description in paragraph 68 of the draft determination of a fixed network telephone service will result in Woosh’s service not being categorised as a fixed telephone network service for the purposes of the number portability determination. By default, this lumps our service, which is best regarded as a fixed telephone network service, in with cellular telephone network service, which is a fundamentally different service to Woosh’s offering.

10. Woosh does not think that the Commission intended this result. It will lead to the stifling of competition in the fixed telephone network service area.
11. To assist the Commission's consideration of the issue, Woosh proposes the following options in relation to describing a fixed telephone network service.
12. First, the Commission could retain in paragraph 68 the words "A *fixed telephone network service* does not extend to a service that allows the end-user's telephone device to perform call hand-over between transmission towers" but then omit subsequent words in that paragraph.
13. Call hand over in Woosh's network will not be performed by a customer's telephone device. Instead, it will be performed by the modem in the gateway to which the customer's telephone is connected. The benefit of this approach is its simplicity: it would be easy for the Commission and industry participants alike to assess whether a particular telephone service is a fixed telephone network service by assessing whether a telephone device performed call hand over.
14. Second, paragraph 68 could be reworded to include wireless networks providing QoS VoIP calls in the description of fixed telephone network service. As far as Woosh is aware, this will distinguish Woosh's service from cellular technologies. We understand that Telecom's and Vodafone's 3G voice offerings are not provided via QoS VoIP (and Woosh is not aware of any plans by those companies to do so).
15. Accordingly, including wireless networks providing QoS VoIP calls in the description of fixed telephone network services would not blur the distinction between fixed and cellular telephone network services.
16. Third, the description in paragraph 68 could be reworded to use or include mobile handsets as a determining feature of a cellular (rather than fixed) telephone network service. Technology such as that used by Woosh does not use mobile handsets. In the event that mobile handsets of the type used by cellular telephone networks become available then Woosh accepts that service to those handsets (including service by Woosh's network) may be considered a cellular service.
17. We would be happy to meet with the Commissioners or Commission staff to more fully explain the nature of our proposed voice service if that would be useful.

Yours sincerely
For Woosh Wireless Limited

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