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Dr Stephen Gale
Telecommunications Commissioner
Commerce Commission
Wellington

cc: Filomena Antunes

PUBLIC VERSION

Dear Stephen,

National roaming specified service review

Vodafone welcomes the opportunity to comment on the Commission's review of the national roaming specified service under Schedule 1 of the Telecommunications Act (the Act). Schedule 3 requires that the Commission consider, on a five yearly basis, if there are reasonable grounds to investigate whether the regulated service should be omitted from the Act.

Scope of the review

As the Commission's letter sets out, the scope of this review is to assess whether the national roaming service should continue to be a specified service or be omitted from Schedule 1 of the Act. Consideration of whether the terms for the specified service should be changed, or whether the service should be designated, are not matters for this review.

Vodafone maintains the view that national roaming should not be a regulated service, and we support the service being omitted from Schedule 1 of the Act in time. This should either happen as part of the current review or, as the Commission has indicated, when it reconsiders the matter in 18-24 months time after the digital dividend auction has occurred.

Vodafone supports the regular review of all regulated services, to ensure that they remain relevant, necessary and proportionate. Regular reviews also ensure that regulation does not undermine competition, investment and innovation incentives in a rapidly changing and dynamic market.

National roaming specification pre-conditions and access seeker terms

The preconditions of gaining access to the national roaming specified service is that an access seeker has at least 100 cellsites and provides coverage to at least 10% of the New Zealand population.

An access seeker must also demonstrate a network build plan and sufficient spectrum holdings to provide mobile coverage to at least 65% of New Zealand's population. The access seeker terms also specifically exclude Vodafone and Telecom from requesting the specified service.

Purpose of national roaming

Regulated national roaming is intended to remove a barrier to entry for mobile new entrants. It allows a new entrant to commercially launch a service, prior to having completed its own full network construction, by leveraging the network of existing incumbent mobile operators. Accordingly, the regulated national roaming service is expected to have a finite lifespan, and should not be considered as a long term regulated option for carriers to maintain equal coverage for all time.

Network population coverage drives both competition and investment, and can be an important source of differentiation. While a minimum level of population coverage may be necessary to offer a viable and competitive service as a new entrant, it is not necessary that established network operators provide a

new entrant identical network coverage to effectively compete. Australia is a good example of a competitive market where the operators have quite different coverage.

The Australian Competition and Consumer Commission does not regulate national roaming. The competitive market has been allowed to develop so that established network operators competitively differentiate their services, including on the basis of network coverage. Network coverage disclosure is prescribed as part of pre-sales collateral for new mobile customers.¹ The Australian Department of Broadband Communications and the Digital Economy² shows that:

- VHA currently cover 94 per cent of the Australian population;
- Optus provides 3G to 96 per cent of the Australian population; and
- Telstra provides 3G to 99 per cent of population.

Co-location can significantly reduce the cost to expand network coverage. Commercial agreements are in place for co-location between carriers today. Co-location is also regulated under the Act. In addition, the Government's Rural Broadband Initiative (RBI) requires that all 157 new RBI sites are specifically designed to allow the co-location and backhaul for multiple carriers on non discriminatory terms.

Vodafone also expects that a fourth entrant would have competitive access to multiple networks for national roaming from the three competing 3G networks: Vodafone, Telecom or 2Degrees. 2Degrees would be a viable network roaming provider with its own network coverage of approximately 90%. A future entrant would be able to consider trade-offs for roaming between incumbent competitors including on the basis of price and coverage.

The national roaming service

2Degrees is the only cellular mobile telephone network operator using a national roaming service. The service is delivered by Vodafone on commercial terms that are agreed between Vodafone and 2Degrees. Vodafone has been supplying 2Degrees with national roaming since it launched in 2009.

2Degrees now operates a 2G and 3G network reaching approximately 90% of New Zealand's population, and national roaming on Vodafone's network extending 2Degrees' coverage beyond that. This is significantly beyond the 65% of population coverage that must be included in an access seeker's network plan, and implies that the conditions of the national roaming specified service should no longer apply to 2Degrees.

In its letter, the Commission notes that national roaming is not competitive as Telecom historically did not operate a 2G network, but instead operated a 3G only CDMA network in the 850 MHz band. In addition, CDMA networks used handsets that were incompatible with GSM networks. Therefore, the Commission identifies that Telecom was not a viable competitive alternative for 2Degrees for national roaming historically, as Vodafone was the only other network that could provide 2G and 3G networks for national roaming.

Today however, the global migration from CDMA and 2G to 3G has now reached a very mature state, and the New Zealand competitive environment has changed significantly. In particular, Telecom has switched off its CDMA network, and migrated its customers to its W-CDMA (GSM-standard) network. Telecom's W-CDMA network provides 2Degrees with a strong competitive alternative for national roaming. Similarly, consumer focus and demand has rapidly shifted away from 2G to 3G services.

Telecom is able to effectively compete in the New Zealand mobile market without the need to operate a legacy 2G network. With 3G services reaching a tipping point in take-up, Telecom is a viable competitive alternative for national roaming. This is also illustrated by the competition for mobile virtual network

¹ Communications Alliance, *Telecommunications Consumer Protection Code*

² http://www.dbcde.gov.au/mobile_services/mobile_phones

operators, where Callplus has recently changed their wholesale network partner from Vodafone to Telecom.

Review of the specified service terms

The current access terms for national roaming are of no benefit to 2Degrees which has already surpassed each of the conditions of access. Similarly, Telecom or Vodafone are excluded from requesting the service. For that reason, it is appropriate to consider whether 2Degrees should be added to the list of incumbents that are specifically excluded from being able to request this service.

The specified service is intended to encourage efficient entry into the New Zealand mobile market. Vodafone does not consider that these conditions, entitling a new operator to request legacy 2G networks services, are appropriate or necessary for a future efficient entrant to enter the New Zealand mobile market. Vodafone does not support regulation that would entitle a new operator to enter the market with an inefficient network strategy.

Vodafone supports updating these terms to have greater relevance to the current state of New Zealand's mobile market and to provide the appropriate incentives for any potential fourth entrant.

Second generation (2G) mobile services

Vodafone supports the rolling-back of the obligation for 2G national roaming. The New Zealand mobile market trend to 3G mobile services is very mature with customers abandoning 2G handsets for affordable 3G handsets. It would be very unusual for a fourth entrant to build a 2G network of its own and (the pre-requisite to requesting a 2G national roaming service) since the market has moved substantially to smartphones which require 3G, and now 4G, bandwidth. Telecom's operation of a single 3G W-CDMA network is evidence of the inefficiency now involved with building out a 2G network.

3G handsets

The average lifetime of a mobile handset operating on Vodafone's network is approximately 18 months with most active 2G handsets being in operation for over this time. Secondly, with the exception of 2Degrees, operators are not actively marketing 2G handsets which suggests that any residual active 2G only handsets are likely to be replaced/upgraded with 3G handsets. Vodafone does not believe it is efficient to be continuing to market handsets for the 2G network.

There is a well established trend for mobile handsets to be compatible across multiple frequencies, including operating both 850, 900 and 2100 MHz. Accordingly, 2Degrees can and does have the ability to mitigate the extent it needs to rely on legacy 2G roaming over time from its own actions and handset choices. Table 1 below is a list of the multi-band handsets from different manufacturers that are being used on the Vodafone network and can be ported to either Telecom or 2Degrees without frequency compatibility problems.

Table 1: Manufacturer and model of multiband mobile telephones

Manufacturer	Model
Apple	iPhone 4
Apple	iPhone 4S
Apple	iPhone 5
Samsung	Galaxy Note II
Samsung	Galaxy S4
Samsung	Galaxy S III
Samsung	Galaxy S4 Mini
HTC	One
HTC	One SV
HTC	8X
Sony	Xperia Z
Sony	Xperia SP
Nokia	Lumia 820
Blackberry	Z10

2G is not a consideration for international roaming agreements

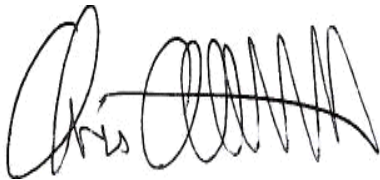
The mature state of 3G is borne out with international roaming competition for inbound roaming services. Competition between New Zealand carriers for inbound roaming is not affected by 2G as overseas carriers are sufficiently confident of "steering traffic" to a New Zealand mobile network, irrespective of their ability to provide 2G roaming.

Conclusion

While Vodafone considers that there are likely to be reasonable grounds for investigating whether the national roaming service should be omitted from the Act today, we accept that it may be appropriate for the Commission to revisit the matter in 18-24 months time, after the digital dividend auction has occurred.

Any further review must ensure that the obligations are current and reflect the developments of the market. Vodafone recommends that such changes include naming 2Degrees as an incumbent operator similar to the status of Vodafone and Telecom, and the unwinding of the obligation for 2G roaming.

Yours sincerely



Chris Abbott
Head of Public Policy
Vodafone New Zealand

