



Review of National Roaming as a Specified Service under the Telecommunications Act 2001

**A Submission to the Commerce
Commission**

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1. Summary

1. 2degrees welcomes the opportunity to comment on the Commerce Commission (**Commission**) Consultation Document '*Review of National Roaming as a Specified Service under clause 1(3) of Schedule 3 of the Telecommunications Act*' (**the Consultation Document**).
2. 2degrees strongly supports the Commission's preliminary view that there are not reasonable grounds to commence a Schedule 3 investigation into whether to omit the national roaming service from Schedule 1 of the Telecommunications Act (**the Act**):
 - National roaming is a critical service for a late mobile entrant to enable it to compete in downstream retail mobile markets at the national level. Consumers consider comparable national coverage a prerequisite when choosing whether to switch mobile service provider.
 - While 2degrees has rapidly expanded its network infrastructure investing [] to deploy to [] population coverage within four years since launch, for 2degrees to extend coverage to the 97% population coverage of the incumbents still requires [] new coverage sites, at an estimated cost of [].
 - 2degrees has only recently become EBITDA positive and sustainable competition remains in its infancy. More than 90% of total retail mobile revenues are captured by Vodafone and Telecom. 2degrees estimate that it would require [] to generate the funds required and to complete the construction of a third national mobile network, particularly given such investment would need to occur alongside the pending acquisition of 700MHz spectrum, the cost of mandatory implementation obligations accompanying that spectrum, rollout of LTE networks required to compete in mobile broadband markets and the larger subscriber acquisition costs faced by a late entrant to the saturated mobile postpay and business markets. Further, given the remaining infrastructure investment is required in the most challenging economic locations additional investment of the speed achieved by 2degrees to date will be very challenging in the current market environment, placing greater importance on national roaming for some years to come.
 - There is no effective competition in the supply of wholesale national roaming services in New Zealand. Unlike in many jurisdictions overseas, there is only one potential supplier of GSM national roaming services in New Zealand, Vodafone. Telecom is not able to provide 2degrees with a national roaming service because it does not operate a 2G network and because it operates its 3G network using different spectrum bands, leading to significant handset incompatibility issues. 2G services are expected to remain important for []
- The downstream retail mobile markets, although having improved since 2degrees' entry, remain very highly concentrated, with an HHI¹ of 4300 overall, indicating a market close to a duopoly. The HHI figures for mobile postpay and mobile business markets, [], will be much higher again²;
- The current commercial agreement with Vodafone was only achieved in the context of extended Commission regulatory inquiries. This agreement is finite in nature []. As a competitor in downstream mobile markets, Vodafone is strongly

¹ Herfindahl-Hirschman Index by revenue. Typically a figure over 2500 is regarded as indicating a concentrated market.

² HHIs for each of the mobile markets (prepay, postpay and business) require access to confidential data, available to the Commission.

incentivised to increase 2degrees' costs by imposing roaming prices well in excess of the competitive level and imposing unfavourable terms and conditions.

- In this context regulated national roaming is an essential regulatory backstop against which these commercial negotiations take place, providing both an incentive for the incumbent operator to engage on reasonable commercial terms and a credible regulatory alternative should commercial negotiations fail. [

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- Removing the obligation to provide national roaming would cause very significant regulatory and commercial uncertainty for 2degrees, which relies on this service to compete nationally. This is especially the case in the context of the forthcoming 700MHz auction as well as the current Telecommunications Act Review. In particular, if the 700MHz auction results in significant sub-1GHz spectrum disparities, regulated national roaming in rural areas is likely to be an appropriate competition safeguard. Roaming would also be required in the case that a new entrant emerges at the auction. Given these possibilities, and the desire for regulatory stability and certainty, it would be entirely inappropriate for the Commission to actively remove national roaming as a regulatory backstop at this time.
3. The above points strongly support the Commission's preliminary view set out in the Consultation Document that the omitting of national roaming as a regulated service would not promote competition in the long term interests of end users of telecommunications services within New Zealand, and thus would be contrary to the section 18 purpose statement of the Act.
 4. 2degrees notes that the Commission has further indicated that it proposes to relook at the merits of a regulatory roaming backstop in 18-24 months, after the 700MHz spectrum auction is settled. 2degrees notes this is a separate issue under the Act and not part of the current Schedule 3 Clause (1)(3) consideration of whether the service should be omitted. If, following the auction, the Commission considers there are reasonable grounds for an investigation into altering the National Roaming service, it could do this at any time under Clause (1)(1) of Schedule 3. In the absence of such an investigation, the Commission is required to conduct a further review whether to omit the national roaming service in 5 years' time under Clause (1)(3) of Schedule 3.
 5. The remainder of this submission sets out our position in more detail:
 - Section 2 outlines the importance of a national roaming service to ensuring 2degrees can compete in downstream retail prepay, postpay consumer and postpay business services markets;
 - Section 3 sets out our comments on the level of competition in the wholesale market for national roaming services, in support of the Commission's preliminary view that this is characterised by no effective competition;
 - Section 4 outlines why a roaming regulatory backstop is required to support on-going commercial negotiations, in light of developments in the market to date;
 - Section 5 discusses how the removal of national roaming obligations would lead to significant regulatory and commercial uncertainty for 2degrees, especially prior to the 700MHz auction and with the forthcoming Telecommunications Act Review.
 6. Confidential information that is included on the basis that it can be withheld under the Official Information Act 1982 is marked in square brackets []. A public version of this submission has also been provided.

2. The importance of national roaming for mobile competition and end users

Competition, enabled through national roaming, has brought considerable benefits to New Zealand mobile users to date

7. 2degrees' entry into the New Zealand mobile market in 2009, breaking the previous duopoly held by Telecom and Vodafone, has seen substantial benefits to mobile users in New Zealand, at a national level, including:
 - *More competitive pricing* – for example 2degrees halved standard prepay voice and text rates at launch; since 2009 consumer purchasing power has improved dramatically, with \$40 now buying 11 times the calling minutes, unlimited texts and three times the data; 2degrees has introduced Aussie Talk and Text, which allows all 2degrees customers to use their pack/plan to call and text both Australia and New Zealand, as well continuing to offer equivalent Australian and New Zealand standard rates if calling outside a pack/plan.
 - *Greater innovation* – for example 2degrees introduced the prepay combo pack to the market, Carryover Minutes and Carryover DataTM (which allows consumers to keep unused minutes and data for up to a year) and Shared Data (which allows consumers to use their data allowance across five devices, including by sharing with friends and family).
 - *Faster roll-out of new services*: Competition has put additional pressure on all mobile operators to invest in new services, for example (most recently) the LTE networks currently announced as being deployed by all operators.
8. Venture Consulting has recently estimated benefits of three player competition in the New Zealand mobile market to date of \$3.9 billion, including a competition dividend of \$1.9 billion³. Venture Consulting estimated a further economic uplift of \$12 billion by 2022 subject to continued mobile market competition.
9. The benefits to date simply wouldn't have been possible without the regulation of national roaming that enabled 2degrees' entry. Further competition in mobile markets will similarly be dependent on the availability of a national roaming regulatory backstop.

National roaming is essential for late mobile entrants to complete their mobile coverage footprint

10. National roaming is critical to enabling 2degrees to compete in downstream national prepay, postpay consumer and postpay business mobile markets. Consumers and businesses alike demand national coverage comparable to that offered by incumbent operators as a pre-requisite to considering switching, irrespective of whether they actually use this coverage, or use it infrequently.
11. Vodafone and Telecom, having rolled out their networks over more than a decade and in very different market conditions, both now have approximately 97% population coverage, with further extensions expected. Such an expansion includes new sites as a result of the industry-funded Rural Broadband Initiative (RBI) and the proposed 700MHz spectrum implementation obligations.

³ Venture Consulting Report, Economic Study of the Benefits to the Economy of Three-Player Competition in the New Zealand Mobile Market, Summary Report, May 2013.

12. The importance of national coverage to an operator's ability to compete is well recognised by the Commission, which as early as 2006 identified that:

Consumers are unlikely to value subscription to a mobile network which limits the regions in which they can make and receive calls, particularly when other competing networks can offer full national coverage at the same or similar prices.⁴

13. This conclusion remains true today, with our customers continuing to tell us that the availability of network coverage is critical to their decision to choose, and continue to acquire, mobile services from 2degrees.
14. As an example, in May 2013 2degrees surveyed 500 New Zealand businesses and asked them to rank in order of priority the factors that most influenced their choice of mobile provider. Network coverage was the overwhelming priority, [].
15. This demonstrates that mobile service must first be available in any given location, before the price and services offered become a factor – hence the critical importance of comparable national coverage to a late entrant's ability to compete.
16. 2degrees considers that without national coverage, the benefits of three player competition would be significantly compromised.

National roaming will continue to be required for an extended period, despite rapid network investment by 2degrees

17. 2degrees has invested heavily in building out its national network infrastructure over a very condensed timeframe by international standards: after only four years since launch 2degrees has rolled out [] sites and achieved [] population coverage, investing [].⁵
18. Despite this, there is still very considerable network investment required in order to achieve comparable coverage to the Vodafone and Telecom networks, which were built out over more than a decade and now cover in excess of 97% of the population.
19. As the 2degrees network expands to lower population density areas, the cost per percentage of population covered increases dramatically. 2degrees estimates that while it has achieved [] population coverage to date, this only represents [] required to extend coverage to that of incumbents.
20. Vodafone and Telecom currently have around 1232 and 1392 800/900MHz sites respectively⁶. To achieve comparable coverage, 2degrees estimates a further [] new coverage sites, at an estimated cost of [] would be required. These estimates are based on current site count only, and so will be an increasing target as Vodafone and Telecom continue to invest in their national networks both independently and through the RBI.
21. Such investment is particularly challenging as a late entrant. As the Commerce Commission is aware, 2degrees is subject to greater capital constraints than its competitors, not yet having made any profits that it can reinvest in the business. In contrast Vodafone and Telecom both have

⁴ Commerce Commission, A review of Cellular Mobile Market Entry Issues, 10 October 2006, para 55.

⁵ This investment figure relates to total capex in deploying and offering services over our network to December 2012. Total investment to date from equity, debt and reinvested revenue from operations is \$1.3 billion.

⁶ MBIE, Email from Len Starling to mobile operators, Implementation requirements, 18 July 2013.

significant earnings they could reinvest and have been able to draw from profits in a duopoly mobile market structure for many years⁷.

22. 2degrees has only recently become EBITDA positive and sustainable competition remains in its infancy. More than 90% of total retail mobile revenues are captured by Vodafone and Telecom. 2degrees estimate that it would require [] to generate the funds required and to complete the construction of a third national mobile network, particularly given such investment would need to occur alongside the pending acquisition of 700MHz spectrum, the cost of mandatory implementation obligations accompanying that spectrum and rollout of LTE networks required to compete in mobile broadband markets.
23. These investments are challenging for all operators, particularly in the context of an early 700MHz rollout internationally⁸, let alone a late entrant that is still building out a national 2G/3G network. Given the remaining infrastructure investment is required in the most challenging economic locations additional investment of the speed achieved by 2degrees to date will be very challenging in the current market environment, placing greater importance on national roaming for some years to come. In addition, as the late entrant 2degrees faces disproportionately higher subscriber acquisition costs (including payment of early termination charges and handset subsidies) compared to its competitors with much larger postpay consumer and postpay business bases.
24. There are significant competing capital demands on the mobile industry at present, including the acquisition of the 700MHz spectrum and mandatory deployment of new LTE networks as a condition of the 700MHz Management Rights, as well as other LTE deployments being required to compete in future broadband markets.
25. In light of these competing capex concerns and capital constraints it is clear a significant period of time will be required for 2degrees to compete its national network []. As such, regulated national roaming will remain critical for a material period of time to come in order to continue to promote competition in mobile markets consistent with section 18 of the Act.
26. In contrast, deferring the limited capital of the late entrant to deploy infrastructure in low density areas, when the regulatory framework has been set up to provide for sharing through national roaming for such areas, would have the effect of limiting competition in the national markets for prepay consumer, postpay consumer and postpay business services. The Commission recognised this fact in its 2008 Final Report on Roaming⁹, where it noted that stringent national build requirements may result in the uneconomical duplication of resources in certain (rural) areas.¹⁰ For this reason, the Commission determined that full infrastructure competition is unlikely to be

⁷ In 2012, Vodafone New Zealand's Net Profit After Tax was \$175 million, up from \$151.5m in 2011. Vodafone New Zealand Limited, Annual Report for the Year Ended 31 March 2012. P.10.; Telecom's net earnings after tax were \$311 million for the year ended June 2012 for its continuing operations following the demerger from Chorus, with an EBITDA (Earnings Before Interest, Taxation, Depreciation and Amortisation) of \$1.079 billion. Telecom Corporation of New Zealand Limited and Subsidiaries, *Condensed consolidated income statement for the period ended 30 June 2012*.

⁸ As at May 2013 no other 700MHz APT band rollouts had occurred in the Asia-Pacific region (Wireless Intelligence).

⁹ Commission, Telecommunications Act 2001: Schedule 3 Investigation into amending the roaming service, Final Report, 10 March 2008, para 137.

¹⁰ The Government has also recognised that many rural and remote areas are not commercially viable on their own, and therefore could not support multiple infrastructure-based operators in competition in the short term. In this context the Government established its Rural Broadband Initiative (RBI). 2degrees strongly support initiatives to efficiently cover rural and remote areas, including the RBI and facilities sharing arrangements including national roaming and colocation. Given the importance of national coverage to competition in less remote areas at the national level, 2degrees considers that any operator who is awarded Government contracts to build in these areas should be required to provide non-discriminatory cost-based access to these services via national roaming. This is especially the case when the industry funds such network rollout (through the Telecommunications Development Levy (TDL)).

appropriate in all areas and that while it was appropriate to have a minimum population coverage requirement, reducing the requirement to commit to 100% population coverage as a condition of the specified service to 65% of the population would better promote competition consistent with the s18 purpose statement.

27. Importantly, 2degrees remains committed to network rollout, however it is concerned that the Commission understand the time that is involved to achieve this.

There is no evidence to suggest national roaming has stifled investment incentives

28. While incumbents have in the past argued that regulated roaming will stifle investment, there is no evidence of such an effect. In contrast, 2degrees considers that competition from 2degrees, enabled through the commercial roaming arrangements with Vodafone (strongly facilitated by the threat by regulated roaming) has driven investment in the New Zealand mobile sector in an effort to maintain and grow market share. Most recently, for example, despite the existence of regulated roaming as a backstop measure, all mobile operators have publicly announced deployments of LTE, their intention to purchase 700MHz spectrum and commitment to further rural rollouts.
29. In addition, in the context of the regulated roaming backstop being in place, Vodafone has contractually agreed with the Crown to rollout to rural customers through its RBI, and committed to rollout LTE700 to these consumers at the same time as 4G is rolled out to urban consumers¹¹.
30. Given rollout using LTE will result in cost efficiencies for Vodafone and Vodafone's public statements regarding LTE rollout, it is highly unlikely the continued regulation of national roaming, and any future designation of roaming that allows Vodafone to recover its costs, will deter efficient investment.

¹¹ Vodafone will also recognise cost efficiencies associated with rolling out 700MHz spectrum to rural areas.

3. Lack of competition in the wholesale market for national roaming

31. 2degrees agrees with the Commission's preliminary view that there is no effective competition in the supply of wholesale national roaming services.
32. As the Commission identifies in its Consultation Document, for technical reasons, 2degrees is only practically able to purchase national roaming services from Vodafone, which similarly operates a 2G/3G network using 900MHz and 2100MHz spectrum bands. This is because handsets can only work on a limited range of frequency bands (typically determined at the manufacturing stage). Further, for a handset to work correctly on a network it must be configured for both the correct technologies (2G/3G/4G capable) and spectrum frequencies.
33. 2degrees estimates that [] of the 2degrees handset base as at July 2013 would need to be replaced for 2degrees to switch national roaming supplier from Vodafone to Telecom. The cost of replacing devices to facilitate a switch of wholesale roaming provider would be prohibitive, placing Vodafone in the position of monopoly supplier of wholesale roaming services.

- **2G roaming:**

Telecom does not have a 2G network to enable roaming for 2degrees' 2G customer base. As at July 2013, [] on the 2degrees network were 2G only devices. None of these devices would operate on the Telecom XT network. Our conservative estimate of the *retail* cost of replacing these devices is []¹².

- **3G Roaming:**

Telecom's 3G network runs on 850MHz spectrum whereas both 2degrees and Vodafone use spectrum in the 900MHz band to supply 3G services. Only a limited range of handsets are able to work across both 850MHz and 900MHz bands¹³. These are predominantly the more expensive handsets. As at July 2013 [] of 2degrees' 3G customers' devices were quad-band and capable of operating in both the 850 and 900 MHz bands¹⁴. []

[]. In contrast [] of 2degrees' customers' devices supported GSM900 (i.e. full Vodafone roaming capability).

- **4G roaming:**

[]

¹² This cost estimate is based on the cost of replacing these devices with an entry level 3G phone capable of operating on the 2degrees UMTS 900 3G network and roaming onto the Telecom UMTS 850 3G network. For the purposes of this calculation we have assumed an RRP of between \$120 and \$200. 2degrees' current entry level price for a quad band 3G device capable of supporting both 850 and 900 MHz frequencies is \$299.

¹³ Currently 6 of 15 devices available from 2degrees support both 850MHz and 900MHz bands. Each of these devices are in our high end range. For example the average price of these devices range from \$299 to \$1049, with an average price of \$641. In contrast devices that do not operate on both 850MHz/900MHz bands range from \$59 to \$349, with an average of \$181.

¹⁴ It is not clear, however, whether this allows for seamless roaming handovers. Typically 850MHz and 900MHz bands are geographically separated. Testing of individual device type is required, particularly given the deviation from 3GPP standards.

]¹⁵

34. Notably, this situation in New Zealand (where there is only one GSM/UMTS operator) is unusual, and is a result of the historical technology choices in the market, where Telecom opted for a 2G CDMA network rather than a GSM network. In addition, it is uncommon for 3G services to be developed in both the 850MHz and 900MHz spectrum bands. Typically, for example in Europe, there is more than one GSM operator that can offer wholesale national roaming services. As such, once entrants have established themselves as credible operators incumbent operators in those countries are incentivised to compete for the wholesale roaming revenue rather than allow their rivals to gain this revenue stream. This is not the case in the New Zealand market.

35. [

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36. As the Commission has previously found, alternatives such as build (including on co-locatable towers) do not form part of the same market, taking into account the SSNIP market definition test, which considers whether a hypothetical monopoly supplier of roaming services would profit from the introduction of a small yet significant non-transitory increase in price of roaming (5-10%) over a one year timeframe. As set out above, 2degrees considers it will take [

] to build out the remaining network.

37. We also note that, while 2degrees supports colocation as a more efficient means of cell site build and a facilitator of competition, 2degrees has found that in practice colocation is often not a practical option. This is because in many cases there are substantial RMA, resource consent/planning and mast strength issues. Colocation also does not future-proof requirements to upgrade the site when capacity demand increases or as new technologies such as 4G require deployment of additional radio equipment. After taking into account these factors, 2degrees' experience is that it often can be less costly to build a new cell site than to co-locate.

¹⁵ [

4. While improved, the downstream mobile markets remain highly concentrated

38. The entry of 2degrees in 2009 strengthened competition in the retail markets, particularly in the supply of services to prepay consumers.
39. However, it is important to recognise that despite 2degrees' success in the prepay market to date, made possible through pro-competitive regulatory settings, the retail mobile markets remain highly concentrated.
40. Together, Telecom and Vodafone still account for more than 90% of total retail mobile revenues in 2011/12 and 2degrees remains a small player. As illustrated in Figure 1¹⁶, this included:
- [] of the mobile prepay market;
 - [] of the postpay consumer market; and
 - [] of the postpay business market.

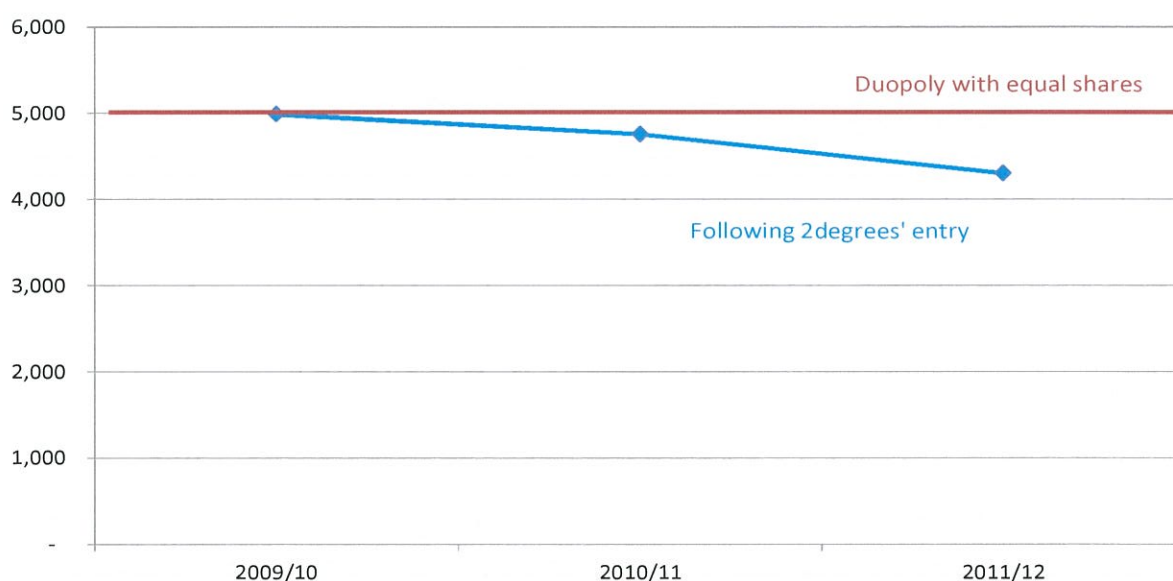
[Figure 1: Revenue shares by mobile market, 2010/11 to 2011/12]

41. While not available by prepay and postpay markets separately, Vodafone continues to be substantially larger in terms of overall mobile retail revenue compared to its rival networks, holding a [] revenue share as compared with Telecom's share of 37% and 2degrees' share of [] in 2011/12. MVNOs, particularly following Vodafone's recent acquisition of TelstraClear, represent a negligible portion of the mobile market.

¹⁶ All data in this section is calculated using 2degrees confidential revenue data, revenue from the Commerce Commission 2012 Annual Telecommunications Report and Telecom Annual Results 2012. Vodafone and Telecom prepay and postpay data not publically available.

42. Figure 2 illustrates the Herfindahl-Hirschman Index (**HHI**) by revenue for combined prepay and postpay consumer and business markets. Typically a figure over 2500 is regarded as indicating a concentrated market.
43. This shows that while currently decreasing, the HHI was 4,300 for 2011/12, indicating that the current market structure still more closely resembles a duopoly than a balanced three-player market.
44. HHIs for the mobile postpay consumer and postpay business markets will be much higher. These markets are particularly important for 2degrees in order to achieve business sustainability. Notably, the postpay markets (consumer and business) account for more than 70% of total retail mobile revenues.¹⁷
45. It is not possible for 2degrees to calculate the HHI by mobile market based on the information available to it, however the Commission will be able to carry out this analysis using data collected from the industry as part of their Telecommunications Industry Survey.

Figure 2: Mobile sector HHI (combined prepay, postpay markets, revenue basis)



46. It is clear from the above that there is still a long way to go in terms of achieving sustainable competition in the respective mobile markets. This is particularly the case for postpay consumer and postpay business markets, which are characterised by higher barriers to entry and switching, and where 2degrees has only a [] and [] market share respectively.
47. Coverage is a key issue for these customers indicating that non-discriminatory roaming will be critical to promoting competition from 2degrees in these markets.

¹⁷ Commerce Commission Telecommunications Industry Survey.

5. The importance of a regulatory backstop to support commercial negotiations

48. 2degrees supports the Commission's view that national roaming regulation:

...is an important backstop, in case commercial negotiations break down in future.¹⁸

As a vertically integrated operator Vodafone is incentivised to increase 2degrees' costs

49. Commercial roaming negotiations reflect the relative competitive positions of Vodafone as a vertically integrated monopoly provider of wholesale national roaming services to 2degrees, and 2degrees' position as the mobile challenger.

50. Given Vodafone's vertical integration, and also its position as the largest retailer of downstream mobile market services, Vodafone's incentive to provide roaming services on non-discriminatory terms is severely limited. This is because providing competitive national roaming services enables 2degrees to compete more intensively with it in downstream markets.

51. While in the current regulatory context Vodafone is obliged to provide national roaming services to 2degrees, without a regulatory mandate it has little incentive to provide the service, or provide the service on terms which reflect what would be available in a competitive market.

52. [

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Current agreements were only possible in the context of on-going regulatory investigations

53. As the Commission is aware, while 2degrees currently has a commercial roaming arrangement with Vodafone, [

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54. [

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55. 2degrees is strongly of the view that commercial roaming arrangements with Vodafone have only been secured against the threat of regulation, including the threat of price regulation. The Commission will be aware of many of the challenges 2degrees has faced in the past and the series of regulatory developments which impacted on the negotiations such that the current commercial arrangement cannot be considered a result of purely commercial pressures.

56. For example:

- The original roaming agreement was only concluded in 2007 following the Commission's review of entry issues in the cellular mobile market and subsequent launch of a Schedule 3

¹⁸ This is also consistent with the Commission's Final Decision on whether to investigate omitting certain Designated and Specified Services from Schedule 1 under clause 1(3) of Schedule 3 of the Telecommunications Act 2001, 16 September 2011.

investigation into national roaming (and colocation) services under the Act. Prior to this TelstraClear had spent years unsuccessfully negotiating such an agreement;

- Subsequent negotiations occurred in parallel to considerations by the Commission (including as requested by the Minister of Communications) as to whether national roaming should be a designated service. This included consideration of relevant mobile termination rate (MTR) benchmarks and charging structures for national roaming. The Commission's conclusion that MTRs are a reasonable proxy for national roaming costs is likely to have contributed to the sharp drop in Vodafone's voice call prices between the January 2007 Undertaking it provided to the Commission and the final commercial agreement.
- Even whilst Commission considerations were on-going in 2009 Vodafone refused to undertake a contracted December 2009 price review. This required direct intervention from the Commission. The revised roaming agreement was not agreed until November 2010.
- The 2011 roaming price review was only concluded after a protracted period of negotiations.

57. In effect, there has been de facto regulatory intervention in the setting of the terms of national roaming service, even though no STD has been prepared and the service has not been designated.

Price and non-price roaming terms remain discriminatory

58. Both price and non-price terms continue to impact competition to the detriment of end-users:

- National roaming pricing continues to inhibit 2degrees' ability to offer data pricing on a national basis. [] Demand for mobile data is expected to increase rapidly over the coming years as demand for data applications, multiple devices and machine to machine services increases.¹⁹

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Removal of roaming as a regulatory backstop

59. In this context regulated national roaming is an essential regulatory backstop against which these commercial negotiations take place, providing both an incentive for the incumbent operator to engage on reasonable commercial terms and a credible regulatory alternative should commercial negotiations fail.

60. While the Commission may commence an investigation on its own initiative at any time in order to propose an amendment to Schedule 1 of the Act, if the Commission were to conclude in the current review that the service should no longer be a specified service it is highly likely that the resulting reduction in the perceived threat of regulatory intervention would adversely affect future commercial negotiations.

61. 2degrees considers it would be contrary to the purpose of the Act were the Commission to actively remove roaming as a regulated service during the current national roaming negotiation period. []

] While 2degrees has a preference for commercial roaming agreements, including

¹⁹ 2degrees is forecasting a [] in volume of data traffic over the three years until 2016, consistent with international trends.

because of the very significant time and resources required to pursue a regulatory process,
[

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6. Removal of national roaming obligations would create significant regulatory and commercial uncertainty

62. Removing the obligation to provide national roaming would cause significant regulatory and market uncertainty for 2degrees, which relies on this service to compete in downstream markets at the national level, and as it continues to invest in its network, new technologies and services.
63. This is especially the case in the context of the forthcoming 700MHz spectrum auction for mobile broadband and the current Telecommunications Act Review.

Regulated roaming may be required to address 700MHz auction outcomes

64. The outcome of the 700MHz spectrum auction has the potential to have a significant bearing on the need for regulated national roaming. This is because:
- Any new mobile entrant would require access to a national roaming service as it builds out its network coverage. Removing national roaming as a regulated service immediately prior to the auction would potentially undermine this new entry;
 - [
-]
- The auction design lacks competition safeguards in the event the reserve price is set above competitive levels. Under the current auction rules there is the potential for the Government to set a reserve price such that one or two of the largest operators, with much deeper pockets, are able to secure significantly more sub-1GHz spectrum than later entrants and secure their dominance in future mobile data markets. For example, if Vodafone were to acquire a 20MHz paired block of spectrum and 2degrees a 10MHz block of spectrum, this would result in very large spectrum disparities, with Vodafone, given their current spectrum holdings, having over 15MHz more of paired sub-1GHz spectrum (as well as additional spectrum above 1GHz). Such a spectrum disparity would give Vodafone very substantial long-term cost and quality advantages, and significantly reduce 2degrees' ability to grow and compete in future LTE data markets.²⁰

As set out in 2degrees' submission to the Ministry of Business, Innovation, Employment (MBIE) (previously provided to the Commission and published on the MBIE website), 2degrees considers any 20MHz allocation (which implies another operator has acquired 10MHz or less of spectrum) needs to be accompanied by appropriate competition safeguards, including Commerce Commission clearance (with possible conditions attached) and designated national roaming in rural areas.²¹ Notably, in other countries LTE national roaming in rural areas has been imposed as a condition of acquiring a larger spectrum block²². While 2degrees considers

²⁰ 2degrees, 700MHz Auction Consultation on Auction Design and Implementation Requirements, and Execution

Submission to the Ministry of Business, Innovation & Employment, Radio Spectrum Policy & Planning, 24 June 2013

²¹ 2degrees also recommended that any 20MHz allocation be automatically assigned to an edge of the 700MHz band to ensure the holder of that spectrum does not isolate other operators with less spectrum from potential spectrum sharing in the future. [

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²² National roaming has been made mandatory as part of spectrum auction processes internationally, for example in Austria, Spain, Italy and France, Canada. Such an obligation would be amply justified by the benefit that such a large share of 700MHz spectrum would confer, not just in rural areas, but at a national level, and given the market structure of the New Zealand mobile market sector. It would be appropriate therefore that a suitable trade-off be applied to protect competition. The FCC in the US has also mandated data roaming on "commercially reasonable terms and conditions" to provide greater coverage and enable smaller operators to compete. <http://www.fcc.gov/rulemaking/05-265>.

this should form a condition of the granting of such a Management Right to avoid protracted regulatory debate on the merits of such regulation this may also be imposed as a condition for Commerce Commission clearance or following a Commerce Commission Schedule 3 investigation. Notably, in coming to its decision not to include competition safeguards such as roaming in the terms of the Management Right, the MBIE, explicitly noted that the Commission is able to investigate the regulation of national roaming.

65. Given these possibilities, and the desire for regulatory stability and certainty, it would be entirely inappropriate for the Commission to actively remove national roaming as a regulatory backstop at this time.

The Telecommunications Act Review is already creating investment uncertainty

66. In addition, as the Commission will be aware, the Government is currently undertaking a Review of the Telecommunications Act much earlier than expected.
67. This review has created significant uncertainty regarding the regulatory framework for the industry, including the role of the Commission and Government in assessing competition and regulatory price setting for the long term benefit of end users.
68. While the first 'phase' of the review is focussed on whether the current framework is fit-for-purpose as the industry transitions from copper to fibre fixed networks, future phases are required to address regulatory issues in the wider industry, including mobile.
69. 2degrees is concerned at any potential of a shift in the regulatory focus from the promotion of competition for the benefit of end-users. 2degrees has invested very substantially in the New Zealand telecommunications sector on the basis of pro-competitive regulatory settings that were established, in line with international best practice.
70. Removal of national roaming as a specified service by the Commerce Commission would only add to the uncertainty for 2degrees and its investors face, whilst making key future investment decisions.