

**COMMERCE ACT 1986: BUSINESS ACQUISITION SECTION 66: NOTICE SEEKING  
CLEARANCE**

**4 October 2013**

The Registrar  
Business Acquisitions and Authorisations  
Commerce Commission  
PO Box 2351  
WELLINGTON

Pursuant to s 66(1) of the Commerce Act 1986 notice is hereby given seeking **clearance** of a proposed business acquisition.

## 1. SUMMARY OF APPLICATION

1.1 Telecom seeks clearance to acquire the management rights for 18 years from 1 January 2014 for 2 x 20 MHz of radio spectrum in the 700 MHz range through MBIE's 700 MHz spectrum auction that is currently scheduled to commence on 29 October 2013 (the "**Acquisition**").

1.2 By this application, Telecom seeks clearance in order to be in a position to bid for 2 x 20 MHz of radio spectrum in the 700 MHz range. It is still in the process of valuing the benefit of the spectrum to it, and then it will be a decision for Telecom management to determine the amount of spectrum it will ultimately bid for, and the price it will offer in the auction.

1.3 Relevant background to the Acquisition is set out in the Preamble to the draft Spectrum Rights Management Agreement, promulgated by the Ministry for Business, Innovation and Employment ("**MBIE**"), and issued on 2 October 2013, as follows:

As a result of the television digital switchover a substantial quantity of spectrum in the 700 MHz band has been freed up. Spectrum is a key resource in the provision of mobile communications and the 700 MHz band is ideally suited for the next generation (4G) of mobile broadband services. The use of the 700MHz band for mobile communications is expected to generate significant economic benefits for New Zealand in future years.

The Crown acknowledges that the quantity of spectrum available to a mobile service provider is linked to the quality and capacity of service able to be offered on their network. Consequently, the spectrum allocation process has the potential to determine the future shape of the mobile communications market which has implications in terms of the Commerce Act 1986.

Acquisition limits have been put in place to manage competition issues between potential service providers. These are reinforced through caveats over the Management Rights. Implementation requirements provide for the rapid and widespread use of the spectrum to provide services to consumers. The implementation requirements ensure the effective and efficient use of the spectrum, and are a part of ensuring that most New Zealanders have 4G mobile coverage within 5 years.

1.4 The Acquisition will not give rise to a substantial lessening of competition in any market. In particular, additional spectrum in the 700MHz range will enable Telecom to:

- (a) provide greater rural and indoor 4G coverage - in particular to provide equivalent coverage to that provided by its existing 3G network in rural areas;
- (b) meet expected demand for 4G mobile data on its network; and
- (c) provide greater peak and average speeds and lower costs per bit for customers in the most efficient manner possible.

1.5 The Acquisition will also enable Telecom to provide customers with higher peak and average 4G speeds at lower costs, particularly in rural areas.

1.6 Successful bidders for radio spectrum in the 700 MHz range must deploy that spectrum to deliver mobile phone services, and there are more onerous roll-out requirements in the auction rules set by MBIE for an operator who acquires 2 x 20 MHz of spectrum. Vodafone will remain a strong competitor in the market for mobile phone services, as will 2Degrees. Accordingly the incremental service quality enhancements that can be achieved through Telecom's acquisition of this spectrum will benefit consumers.

1.7 The efficiencies to New Zealand businesses of having a faster 4G network, [ ], will be significant.

1.8 By contrast, if Telecom does not acquire 2 x 20 MHz [ ] Telecom will have to invest in additional technology [ ].

1.9 [ ]

**PART 1: TRANSACTION DETAILS****1. Provide the name of the acquirer (person giving notice), and the name and position of the individual responsible for the notice.**

1.1 This notice is given by Telecom New Zealand Limited ("**Telecom**"):

Telecom New Zealand Limited  
Level 2, Telecom Place  
167 Victoria Street West  
**AUCKLAND 1142**

Attention: Melissa Anastasiou / Sasha Daniels  
Telephone: +64 9 355 4873 / +64 9 357 4604  
Fax: +64 9 377 2659 / +64 9 309 2238  
Email: [melissa.anastasiou@telecom.co.nz](mailto:melissa.anastasiou@telecom.co.nz)  
[sasha.daniels@telecom.co.nz](mailto:sasha.daniels@telecom.co.nz)

1.2 All correspondence and notices in respect of the application should be directed at the first instance to:

Russell McVeagh  
Barristers & Solicitors  
PO Box 8  
**AUCKLAND 1140**

Attention: Sarah Keene / Troy Pilkington  
Telephone: 09 367 8133  
Fax: 09 367 8595  
Email: [sarah.keene@russellmcveagh.com](mailto:sarah.keene@russellmcveagh.com)  
[troy.pilkington@russellmcveagh.com](mailto:troy.pilkington@russellmcveagh.com)

**2. Provide the name of the other merger parties, and the name/position of the relevant individual within the relevant merger parties.**

2.1 The other party to the acquisition is MBIE on behalf of the New Zealand Government.

2.2 Contact details are as follows:

Ministry of Business, Innovation and Employment  
Resources, Energy and Communications Branch  
PO Box 5488  
Wellington 6011

Attention: Len Starling  
Telephone: 04 472 0030  
Fax: 04 499 0969

**3. With respect to the merger parties, list the relevant companies and the person or persons controlling these directly or indirectly. Please use organisational charts or diagrams to show the structure of the ownership and control of the acquirer and participant(s) to the acquisition.**

*Telecom New Zealand Limited*

3.1 Telecom New Zealand Limited is a subsidiary of Telecom Corporation of New Zealand Limited. The organisation chart of the Telecom group is included in **Appendix One**.

*The Ministry of Business, Innovation and Employment*

- 3.2 No persons are interconnected or associated with the Crown or MBIE that are relevant to this application.

*Links between participants and existing competitors*

- 3.3 Telecom has interconnection agreements with a number of companies and is required by regulation under the Telecommunications Act 2001 to have various relationships with its competitors, including arrangements with access seekers for designated and non-designated services.

- 3.4 Telecom also owns:

- (a) 33.3% of TNAS Ltd, a joint venture company involved in managing toll free number portability. The other shareholders in TNAS Ltd are entities associated with Vodafone.
- (b) 16.6% of TSM NZ Ltd, a "mobile wallet" joint venture company. 2Degrees and Vodafone also each hold 16.66% of TSM NZ Ltd.

**4. Provide details on what is to be acquired.**

- 4.1 Telecom seeks clearance to acquire the New Zealand wide management rights for 18 years from 1 January 2014 for 2 x 20 MHz of radio spectrum in the 700 MHz range through MBIE's 700 MHz spectrum auction that is currently scheduled to commence on 29 October 2013.<sup>1</sup>

- 4.2 While MBIE will allow new or non-mobile network operators to participate, the Government requires that the 700 MHz band of spectrum be used to provide LTE (Long Term Evolution), also referred to as fourth generation ("4G"), mobile networks.

- 4.3 The auction will impose conditions on parties that acquire 700 MHz spectrum in the auction, that are designed to ensure that at least 90% of New Zealanders have access to a 4G network and faster broadband coverage within five years, including:

- (a) All successful bidders that purchase 2 x 15 MHz or 2 x 20 MHz will be required to build (respectively) five or ten new cellsites each year for five years, in areas in which they do not currently provide mobile coverage using their own infrastructure;
- (b) Successful bidders that already operate cellular mobile networks will be required to upgrade 75% of their existing 850/900 MHz 2G/3G cellsites in rural areas to 4G using 700 MHz, within five years, up a to a maximum of 300 cellsites each; and
- (c) Successful bidders that do not already operate a cellular mobile network will have five years to deploy 4G services to at least 50% of New Zealanders.

**5. Fully explain the commercial rationale for the proposed merger. Specify whether this is part of an international merger.**

- 5.1 As the Commission is aware:

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<sup>1</sup> Pursuant to section 139(1) of the Radiocommunications Act 1989, the grant of any management right for radio spectrum is deemed to be the acquisition of assets of a business and is subject to section 47 of the Commerce Act.

- (a) As a result of the digital switchover a substantial quantity of spectrum in the 700MHz band has been freed up. The 700MHz band of spectrum is being auctioned by MBIE to enable mobile phone operators to build 4G mobile networks, which in turn MBIE expects will generate significant economic benefits for New Zealanders in future years. The 700 MHz band is particularly well suited to enabling an efficient roll out of quality nationwide 4G mobile network coverage. This is because spectrum in the 700 MHz band:
    - (i) operates better over longer distances than spectrum in higher frequency bands, allowing operators to provide greater coverage in rural areas using fewer cell sites and less equipment; and
    - (ii) penetrates buildings better than spectrum in higher frequency bands, allowing for improved indoor coverage, including in urban and rural areas.
  - (b) 4G mobile networks will offer customers significantly improved data speeds relative to 3G.
- 5.2 Telecom, and the other mobile network operators, can, and will initially, offer 4G services using 1800 MHz alone (see paragraph 13.3 below). However, the acquisition of 700 MHz is regarded as important for Telecom's competitive offering as it will enable Telecom to:
- (a) provide greater rural and indoor 4G coverage - in particular to provide equivalent coverage to that provided by its existing 3G network in rural areas;
  - (b) meet expected demand for 4G mobile data on its network. Demand for 4G mobile data is currently forecast to double year on year in the foreseeable future; and
  - (c) provide greater peak and average speeds and lower costs per bit for customers in the most efficient manner possible. The ability to obtain higher peak and average speeds will be a particularly attractive proposition [ ].
- 5.3 [ ]
- 5.4 [ ]
- 5.5 If Telecom does not acquire 2 x 20 MHz [ ] Telecom will have to invest in additional technology [ ].
- 5.6 Telecom estimates the efficiencies to New Zealand businesses of having a faster 4G network to also be significant.
- 5.7 Accordingly, there will be significant benefits to mobile customers if Telecom is able to acquire 2 x 20 MHz of 700 MHz given the greater peak speeds that Telecom will be able to offer, better service, efficiencies and/or cost savings given the highly competitive nature of New Zealand's mobile phone industry.<sup>2</sup>
- 5.8 The acquisition is part of Telecom's strategy to remain a vigorous competitive alternative to Vodafone, New Zealand's largest mobile operator (by connections and revenue) and largest holder of mobile spectrum allocations.
- 5.9 The acquisition is not part of an international merger.

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<sup>2</sup> See the Commission's Annual Telecommunications Monitoring Report 2012 (April 2013).

**6. Provide copies of the final or most recent versions of any document bringing about the proposed merger.**

6.1 Telecom understands that the Commission already has copies of the key Government and MBIE materials regarding the 700 MHz auction.

**7. If any other jurisdiction's competition agency has been (or will be) notified of the proposed merger, please list each competition agency notified (or to be notified) and the date of the notification.**

7.1 The Acquisition only relates to New Zealand.

## **PART 2: THE INDUSTRY**

**8. Describe the relevant goods or services supplied by the merger parties (it is sufficient to refer in general terms to activities in which there will be no aggregation).**

### **General**

8.1 The Commission is familiar with Telecom. Telecom and its interconnected bodies corporate are suppliers of telecommunications services in New Zealand and Australia. They provide a full range of telecommunications products and services, including local, national and international telephone services, mobile services, data and internet services.

### **Spectrum**

8.2 Telecom understands from the Commission's previous commentary on MBIE's auction of the management rights of 700 MHz digital spectrum that it is familiar with the likely uses for 700 MHz spectrum, including the conditions that will be imposed on successful bidders in MBIE's auction.

8.3 Spectrum is required as an input to provide a range of mobile and wireless services.

**9. Describe the industry or industries affected by the proposed acquisition. Where relevant, describe how sales are made, the supply chain(s) of any product(s) or service(s) involved, and the manufacturing process. If relevant, provide a glossary of terms and acronyms.**

### **Retail mobile phone services**

9.1 The industry affected by the proposed acquisition is the retail market for mobile phone services in New Zealand. As the Commission is aware, New Zealand's retail market for mobile phone services is highly competitive.<sup>3</sup> Telecom understands the Commission is familiar with how sales are made in the retail mobile phone services market.

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<sup>3</sup> See the Commission's Annual Telecommunications Monitoring Report 2012 (April 2013).

## Spectrum

*Table One - Existing spectrum management rights*

	700 MHz	850 MHz	900 MHz	1800 MHz	2100 MHz	2600 MHz
2Degrees	-	-	2x9.8	2x25	2x15	-
Telecom	-	2x15	-	2x25	2x15	2x20
Vodafone	-	-	2x15	2x25	2x25	2x15
Telstra	-	-	-	-	2x5	-

Source: Telecom.

- 9.2 The table above sets out Telecom's understanding of the current allocation of spectrum management rights for bands potentially useable for mobile phone services.
- 9.3 Paragraph 5.1 and 5.2 above set out the specific properties, and intended use, of spectrum in the 700 MHz band - namely to provide 4G mobile services.
- 9.4 In addition to the 700 MHz band, 4G services can also, at least eventually, be provided using all of the 850, 900, 1800, 2100 and 2600 MHz bands. However a mobile operator cannot offer 4G services in a band it is also using to offer 3G services. This prevents Telecom from using its existing 850 and 2100 MHz spectrum to offer 4G services. Further, Telecom notes that New Zealand's low user density makes it costly for an operator to offer a wide area of 4G service in the 2600 MHz band.
- 9.5 If a mobile network operator finds that it needs to increase its 4G capacity in a particular area, its options include:
- (a) deploying additional spectrum (including from other bands that it holds);
  - (b) upgrading cell sites that are experiencing congestion via capital expenditure on a site-by-site basis; or
  - (c) partnering with another operator that has differing quantities of spectrum to pool spectrum and other resources to achieve joint cost savings and deliver faster 4G services (for example, infrastructure sharing).
- 9.6 The technology choices available to mobile network operators are governed by the state of development of those technologies by international equipment providers, such as Huawei, Ericsson, NSN and Alcatel Lucent.
- 9.7 Mobile network operators within New Zealand have almost no control over those development processes and negotiate between competing vendors for what products will be made available at what prices. All operators are presented with essentially the same choice of technologies, although different vendors will have prioritised different technologies in their offerings.
- 9.8 Mobile network operators then choose which technologies to deploy and when, relative to other considerations such as:
- (a) The current state of their network;
  - (b) Current and expected customer demand;
  - (c) Desired market positioning of services; and



- (d) Prices of technologies and spectrum.
- 9.9 Purchases by one network operator of one or more technologies have no impact on the ability of another operator to purchase the same or different technologies from the same or another network equipment vendor. The quantity available for supply of these products is very large relative to the size of the New Zealand mobile network operators' requirements.
- 9.10 This is different in the case of spectrum, which is a finite resource. Spectrum used by one operator cannot be used by another aside from an explicit spectrum-sharing agreement. Due to the way in which MBIE has formulated the auction rules, each of the three existing national mobile operators have an opportunity to acquire 2 x 15 MHz of 700 MHz spectrum if they so choose. Telecom will only have the opportunity to purchase 2 x 20 MHz of 700 MHz spectrum if one of the other operators, most likely 2Degrees for the reasons described at paragraph 15.3(c) below, actively chooses to employ other techniques to satisfy its expected future demand.
- 9.11 While some base amount of spectrum is required to provide mobile phone services, beyond a base amount there are trade-offs available to operators between spectrum and network equipment and between different types of network equipment.
- 9.12 Examples of the different mobile network equipment available include:<sup>4</sup>
- (a) Sectorisation of cell-sites;
  - (b) Additional cell-sites;
  - (c) 4x4 MIMO;
  - (d) Multi-User MIMO;
  - (e) Small Cells;
  - (f) Joint Processing;
  - (g) Carrier Aggregation; and
  - (h) Active Antennas.
- 9.13 These all have different costs and different benefits, both as between the different equipment and as between different operators purchasing the same equipment. Accordingly, a range of different trade-offs exist in the selection of various technologies and the purchase of additional spectrum.
- 9.14 The different enhancements available to mobile networks from different technologies or acquisition of spectrum will show up for customers in the mobile phone services market as some or all of:
- (a) Changes in peak rates (for users in the most favourable conditions);
  - (b) Changes in average throughput (and therefore typical user experience); and/or
  - (c) Changes in cell edge rates (for users in marginal coverage conditions).
- 9.15 The different technologies and/or the acquisition of spectrum could be described as, at a high-level, providing the benefits set out in Table Two below.

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<sup>4</sup> A glossary of these terms is included at **Appendix Three**.

Table Two - Effects of different technology / spectrum options

Technology	Effect on peak	Effect on average	Effect at edge
More spectrum	Improve	Improve	Small improve
Sectorisation	Same	Improve	Small improve
More sites	Same	Improve	Improve
4x4 MIMO	Improve	Improve	Same
MU-MIMO	Same	Improve	Same
Small Cells	Same	Improve	Improve
Joint Processing	Same	Small improve	Improve
Carrier Aggregation	Improve	Small improve	Small improve
Active Antennas	Same	Improve	Improve

Source: Telecom

9.16 These are all subject to availability of devices able to take advantage of the technology and frequency provided.

**10. Describe the current industry trends and developments including the role of imports and exports, emerging technologies, and/or changes in supply and demand dynamics.**

10.1 Telecom understands the Commission is familiar with the industry.

10.2 Specifically relevant to this application, mobile network operators in New Zealand are currently in the process of rolling out 4G mobile services to customers. Initially all will be using the 1800 MHz band to do this.

10.3 Telecom intends to introduce 4G services to parts of Auckland in October 2013 and to parts of Wellington and Christchurch by the end of 2013 using its 1800 MHz spectrum. Telecom also expects that 4G services will be introduced to other parts of New Zealand during 2014, although the extent of that coverage is yet to be determined.

10.4 Telecom also understands that:

(a) Vodafone has commenced 4G services in parts of Auckland, Taupo, Wellington, Christchurch, Wanaka, Queenstown, and New Plymouth via the 1800MHz band; and

(b) 2Degrees intends to introduce 4G services using the 1800 MHz band during 2014.

10.5 As explained further at paragraphs 13.9 - 13.12 below, the timing of widespread use of the 700 MHz band in the roll out of 4G will be impacted by equipment and handset availability. Accordingly, the benefits of the Acquisition for competition for 4G services are, on Telecom's best estimate, likely to substantially accrue in [ ], towards the end of the Commission's standard period for assessment of the impact of acquisitions.

**11. Please highlight any relevant mergers that have occurred in this industry over the past three years.**

11.1 Telecom is aware of the following acquisitions that involved the transfer of the management rights of radio spectrum in the last three years:

- (a) Craig Wireless subsidiary Woosh Wireless (NZ) Limited's acquisition of the business and assets of Woosh Wireless Limited in 2011;
- (b) Vodafone New Zealand Limited's acquisition of TelstraClear Limited in 2012, and the associated divestment of spectrum to Telstra Corporation;
- (c) Woosh Wireless (NZ) Limited's acquisition of the remaining spectrum management rights (being management rights over 35 MHz of 2.3 GHz spectrum) previously held by Railway St Industries Limited (formerly Woosh Wireless Limited); and
- (d) 2Degrees' acquisition of 2x15 MHz of 1800 MHz spectrum from Telstra Corporation in February 2013.

### **PART 3: MARKET DEFINITION**

#### **HORIZONTAL AGGREGATION**

**12. For each area of aggregation of market shares, please define the relevant market(s).**

12.1 The proposed acquisition will lead to Telecom acquiring additional wireless spectrum management rights, in addition to its current holdings (see Table One). It is expected that Vodafone and 2Degrees will also acquire additional wireless spectrum management rights at the same time.

#### **Market definition**

12.2 Based on the Commission's approach in *Vodafone New Zealand Limited and TelstraClear Limited* [2012] NZCC 33, Telecom considers the relevant markets to be the national markets for:

- (a) mobile phone services (for residential and business customers); and
- (b) wireless spectrum management rights suitable for mobile phone services.

12.3 In relation to nationwide spectrum markets, the Commission has left open the question of whether spectrum frequencies constitute individual product markets, or comprise a broader differentiated product market.<sup>5</sup>

12.4 Given:

- (a) the 700 MHz auction rules require the management rights for the 700 MHz spectrum be employed to deliver mobile phone services; and
- (b) in practice all the incumbent mobile phone services providers will use their 700 MHz holdings to deliver 4G services; and

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<sup>5</sup> *Vodafone New Zealand Limited and TelstraClear Limited* [2012] NZCC 33 at [106].

- (c) Telecom believes all three incumbent operators have launched or will launch 4G services using the 1800 MHz spectrum;

Telecom does not consider it necessary to define a product market that is limited to the 700 MHz spectrum.

- 12.5 On balance, the most likely market segment affected by the Acquisition is the segment for 4G mobile services, within the broader mobile phone services market.

**13. Where relevant, please explain how products or services are differentiated within the market(s).**

**Mobile phone services market**

- 13.1 Telecom understands the Commission is familiar with Telecom, Vodafone and 2Degrees' respective positioning in the mobile phone services market.

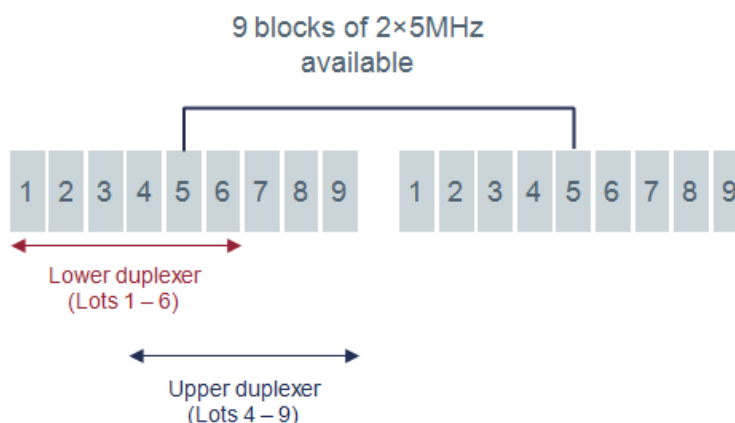
- 13.2 At a more detailed level, Vodafone has been the first mobile network operator to launch 4G mobile services using 1800 MHz spectrum. Telecom intends to launch 4G services later in 2013 using 1800 MHz spectrum and it is anticipated that 2Degrees will launch 4G services in 2014, also using 1800 MHz spectrum. The provision of 4G mobile services is in its infancy. How competition for 4G services will affect the broader mobile phone services market is not yet known and will depend, in part, on the acquisition of 700MHz spectrum, handset availability, overall network rollout costs, customer demand and other factors.

**Wireless Spectrum Management Rights**

- 13.3 700 MHz has better propagation (coverage) and in-building penetration characteristics than other spectrum currently available to mobile operators for the provision of 4G mobile services. Accordingly, other bands are likely to have poorer indoor coverage in rural areas in comparison to 700 MHz, and poorer coverage of remote areas away from population centres. It is possible, however, to provide a similar 4G service using spectrum in the 850, 900, 1800, 2100 and 2600 MHz bands without any 700 MHz spectrum,<sup>6</sup> and it is likely 1800 MHz will remain a key 4G spectrum as it will be the common band for roaming between countries given the likely differences in 700 MHz band plan specifications around the world (see paragraphs 13.5 to 13.11 below).

- 13.4 Specifically in relation to the 700 MHz band, [ ].

*Table Three - 700 MHz spectrum range*



<sup>6</sup> [ ]

- 13.5 [ ]
- 13.6 [ ]
- 13.7 [ ]
- 13.8 [ ]
- 13.9 [ ]
- 13.10 [ ]
- 13.11 [ ]
- 13.12 [ ]

13.13 As the Commission will be aware, the position of each successful bidder's spectrum in the 700 MHz band will be determined during a third round of the auction, known as the "Combinatorial Assignment Phase". At this phase bidders will know how much spectrum they will receive, but they may bid extra to gain their preferred "pole" position. MBIE's auction manager will then determine the outcome based on whatever permutation provides the highest value to it in terms of the various combinations of the respective parties' "positioning" bids. Telecom anticipates that this allocation phase may occur during early January 2014.

#### VERTICAL INTEGRATION

- 14. Provide details of any creation or strengthening of vertical integration that would result from the proposed merger. Please use organisational charts or diagrams to illustrate the structure of the ownership and/or control of the participants and the vertical relationships in question.**
- 14.1 The acquisition will result in Telecom acquiring additional spectrum management rights that it will use to compete in the national market for mobile phone services.
  - 14.2 The two other mobile phone operators in New Zealand are also likely to acquire additional spectrum management rights at the same time.

#### PART 4: COUNTERFACTUAL

- 15. In the event that the proposed merger does not take place, describe what is likely to happen to the business operations of the merger parties and the market/industry.**
- 15.1 If 2Degrees chooses not to purchase 2 x 15 MHz meaning an additional 2x5 MHz of 700 MHz spectrum is made available for purchase in the Supplementary Allocation Phase and Telecom does not acquire 2 x 20 MHz of 700 MHz spectrum then [ ].
  - 15.2 In those circumstances, Telecom has identified two potential counterfactuals:
    - (a) Vodafone will acquire [ ] of 700 MHz, and 2Degrees will acquire [ ] of 700 MHz; and
    - (b) Vodafone will acquire [ ] of 700 MHz, and 2Degrees will acquire [ ] of 700 MHz, with [ ] remaining unsold.

15.3 Telecom considers these as the potential counterfactuals given:

- (a) The management rights in the 700 MHz band will only be purchased by those that wish to use it to offer mobile 4G services (for the reasons set out at paragraph 4);
- (b) Telecom does not consider it likely that there will be any other bidders apart from Vodafone and 2Degrees (or companies associated with those entities) for the management rights in the 700 MHz band, in particular due to the auction conditions on network roll-out for bidders that do not already operate cellular mobile networks; and
- (c) 2Degrees has stated in the media that it has funding to participate in the 700 MHz auction, and that it would like to obtain 2 x 15 MHz of 700 MHz spectrum.<sup>7</sup> Given the auction rules, provided 2Degrees bids at or above the known reserve price, 2Degrees will be able to acquire as many lots (up to 2 x 15 MHz) as it wishes to acquire during the initial bidding phase.

On the basis of 2Degrees' comments, Telecom considers it highly unlikely that 2Degrees will not bid for at least some 700 MHz spectrum at or above the known reserve price. Telecom also considers it unlikely that 2Degrees will [ ].

Further, Telecom considers that 2Degrees may not seek to acquire [ ] at the reserve price. Based on 2Degrees' current market share, and target demographics (consumers and small businesses), [ ] seems likely to be sufficient to meet their business requirements. In Australia, [ ].

Telecom considers it likely that 2Degrees will regard the acquisition of [ ], coupled with its existing holdings of 2 x 25 1800 MHz, as sufficient to be a vigorous 4G competitor and achieve its targeted customer growth and data speeds. Even if 2Degrees' peak speeds slow slightly due to greater than expected customer growth, Telecom does not consider that this will have a material impact on 2Degrees' competitive offering given its targeting of price conscious consumers [ ]. Avoiding the cost of acquiring [ ] seems consistent with 2Degrees' approach of having lower overheads in order to best compete on price. [ ].

Further, 2Degrees will be aware that if it ever decides that it requires additional 4G capacity it will be open to it to explore one of the options referred to at paragraph 9.5 above.

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<sup>7</sup> Tom Pullar-Strecker "2Degrees wants one-third chunk of 4G pie" (26 June 2013). Retrieved from: <http://www.stuff.co.nz/technology/digital-living/8840998/2Degrees-wants-one-third-chunk-of-4G-pie>

**PART 5: COMPETITION ANALYSIS****EXISTING COMPETITORS**

**16. Identify all of the relevant competitors in the market(s), including near competitors and importers in the market(s), and describe how they all compete in the market(s).**

16.1 The Commission is already familiar with the key competitors, namely Vodafone and 2Degrees, in the relevant markets.

**17. Outline the estimated market shares in terms of sales, and, where relevant, volume and productive capacity, of the merger parties and competitors identified above. Please include the estimated total value of the domestic market; and the source of the data provided.**

17.1 The market share by total connections and revenue (pre and post-paid) of mobile network operators, as at Q3 FY2013, is as follows:

*Table Four - Mobile telephone market shares by connections and revenues*

	Market share by connections (000's)			Market share by revenue (\$m)		
	Q1FY2013	Q2FY2013	Q3FY2013	Q1FY2013	Q2FY2013	Q3FY2013
Vodafone	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Telecom	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
2Degrees	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Other/MVNO	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: IDC and Telecom.

**18. To what extent do you consider that the merged entity would be constrained in its actions by the conduct of existing competitors in the markets affected?**

18.1 The mobile services market in New Zealand is expected to remain highly competitive, and Telecom will remain constrained in its actions by Vodafone, the largest mobile operator in New Zealand, and 2Degrees.

**POTENTIAL COMPETITION****Conditions of Entry**

**19. Please explain the requirements for new entry and/or importers in the relevant market(s).**

19.1 In its discussion document on the 700MHz Digital Dividend, the Ministry of Economic Development (as it was) stated that, while an increased number of operators may be beneficial for competition, each operator would be required to invest in network expansion and improvement, while having access to a reduced share of total market revenue.<sup>8</sup> The limited population and market size in New Zealand, coupled with difficult terrain for radio propagation, may cause issues with *minimum efficient scale* of new entrants in the market. The MED stated that it is not clear to what extent other operators could be supported.<sup>9</sup> In any event, the MED was not aware of a potential fourth mobile network operator.<sup>10</sup>

<sup>8</sup> Ministry of Economic Development, "Digital Dividend: Opportunities for New Zealand" (August 2011) at p 20.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

19.2 The MED further stated:<sup>11</sup>

...it is not clear whether providing for a new entrant in the mobile market would improve competitive outcomes in the market as a whole, or whether competition would be mainly between relative newcomer 2Degrees and the new entrant, **potentially undermining wider competition** with the larger mobile companies.

**[Emphasis added]**

19.3 In response to the discussion document, the Commission stated that it thought new entry was unlikely:<sup>12</sup>

The Commission is of the view that a sustainable new entry into the mobile market in the short term is unlikely.

19.4 Telecom shares the views of MBIE and the Commission that a new entrant in the mobile market is unlikely. Accordingly, Telecom does not expect any other bidders for the nationwide management rights of 700 MHz spectrum apart from Vodafone and 2Degrees.

**20. Include a full discussion on any factors that could impede entry; and what might prompt new entry post-merger.**

20.1 As set out at paragraph 19 above, Telecom considers that a new entrant in the mobile market is unlikely.

#### **LIKELIHOOD, EXTENT AND TIMELINESS OF ENTRY (THE LET TEST)**

**21. Please name any likely businesses (including overseas businesses) you are aware of that do not currently supply the market but which you consider could supply each of the relevant market(s). Discuss the likelihood of such entry.**

21.1 As above, Telecom is not aware of any potential new entrant mobile network operator in New Zealand.

**22. To what extent do you consider that potential entry would be sufficient to constrain the merged entity in the markets affected?**

22.1 In light of the discussion at paragraph 19 above, this analysis is not relevant to this application.

**23. How long would you expect it to take for entry to occur, and for market supply to increase, in respect of each of the potential entrants named in question 21 above?**

23.1 In light of the discussion at paragraph 19 above, this analysis is not relevant to this application.

#### **COUNTERVAILING POWER OF BUYERS**

**24. To what extent do you consider that the merged entity would be constrained in its actions by the conduct of buyers in the markets affected?**

24.1 Given the high degree of competition among the existing participants, Telecom does not consider it necessary for the Commission to consider countervailing buyer power in order to determine this clearance application.

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<sup>11</sup> Ibid.

<sup>12</sup> Letter from the Commerce Commission to the Manager of Radio Spectrum Policy and Planning regarding the allocation of Digital Dividend Spectrum, 16 December 2011.



**25. If you consider that there is a constraint from buyers, identify the top five buyers by sale and/or volume (including overseas companies/importers) in the relevant market(s). Where there are significant differences in the size of buyers please provide details for five medium and five small buyers.**

25.1 See paragraph 24.1 above.

#### **COORDINATED MARKET POWER**

**26. Identify and discuss the various characteristics of the market that, post-merger, you consider would either facilitate or impede coordination.**

26.1 As the Commission has previously observed, Telecom, Vodafone and 2Degrees compete vigorously in the mobile phone services market.

26.2 Telecom does not expect any changes in the nature, extent or vigour of competition in the New Zealand mobile phone services market after the Acquisition.

#### **EFFICIENCIES**

**27. If applicable, provide a description of any efficiencies that you believe the acquisition could bring. Would such efficiencies enhance rivalry, or offset the impact of a lessening of competition?**

27.1 As set out at paragraphs 5.2 to 5.6, significant efficiencies will arise if Telecom acquires 2 x 20 MHz in the 700 MHz band, relative to the counterfactual.

27.2 These efficiencies are part of Telecom's strategies to remain a vigorous competitive constraint, in particular on New Zealand's largest mobile provider, Vodafone. Consumers will benefit from the better service, efficiencies and/or cost savings given the highly competitive nature of New Zealand's mobile phone industry.

#### **OTHER FACTORS**

**28. Where relevant, provide a description of any other features of the market(s) that should be taken into account in considering the effect of the proposed merger.**

28.1 No further features are relevant.

### **PART 6: FURTHER INFORMATION AND SUPPORTING DOCUMENTATION**

**29. Provide the contact details of relevant competitors, buyers and suppliers and any other relevant market participants in the form of the example table shown below.**

29.1 Telecom anticipates that the Commission already has access to the necessary contact details of other industry participants.

**30. Please provide a copy of the most recent annual report for each of the merger parties. If an annual report is not available, please provide a copy of the audited financial statements of the merger parties (profit and loss account, showing total turnover and profit before tax, and balance sheet). If the merger only relates to a segment of the business of the merger parties, please also provide a copy of any management accounts for the relevant business segment.**

30.1 A copy of Telecom Corporation of New Zealand Limited's Annual Report for the year ended 30 June 2013 is available online at:

<http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MTk5NTY2fENoaWxkSUQ9LTF8VHlwZT0z&t=1>

## **PART 7: CONFIDENTIALITY**

**31. If you wish to request confidentiality for specific information contained in or attached to the notice, please state why you consider the information to be confidential and state the reasons for your request in terms of the criteria set out in the Official Information Act 1982.**

31.1 Confidentiality is sought in respect of the information in this application that is contained in square brackets. Confidentiality is sought for the purposes of section 9(2)(b) of the Official Information Act 1982 on the grounds that:

- (a) the information is commercially sensitive and valuable information which is confidential to the participants; and
- (b) disclosure would be likely unreasonably to prejudice the commercial position of the participants, as the parties providing the information.

Telecom requests that it be notified of any request made to the Commission under the Official Information Act 1982 for release of the confidential information. Telecom also requests that the Commission seek and consider Telecom's views as to whether the information remains confidential and commercially sensitive at the time responses to such requests are being considered.

The foregoing equally applies in respect of any additional information provided to the Commission that is expressed to be confidential.

THIS NOTICE is given by Telecom New Zealand Limited.

The company hereby confirms that:

- all information specified by the Commission has been supplied;
- if information has not been supplied, reasons have been included as to why the information has not been supplied;
- all information known to the applicant which is relevant to the consideration of this application has been supplied; and
- all information supplied is correct as at the date of this application/notice.

The company undertakes to advise the Commission immediately of any material change in circumstances relating to the application/notice.

Dated this **4 October 2013**

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Melissa Anastasiou, General Counsel, Telecom

I am an officer of the company and am duly authorised to make this application/notice.

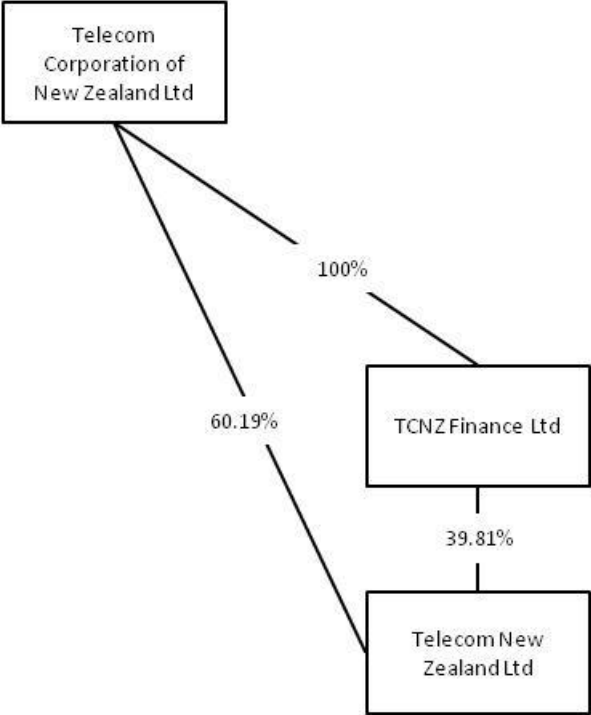
APPENDIX ONE

TELECOM ORGANISATIONAL DIAGRAM

Telecom New Zealand Ltd is ultimately 100% owned by Telecom Corporation of New Zealand Ltd, which is listed on the New Zealand Stock Exchange.

The holders of more than 5% in Telecom Corporation of New Zealand Ltd are The Bank of New York Mellon Corporation and Blackrock Investment Management (Australia) Ltd.

The directing shareholdings in Telecom New Zealand Ltd are shown below.



Telecom New Zealand Ltd also owns:

- 33.3% of TNAS Ltd, a joint venture company involved in managing toll free number portability. The other shareholders in TNAS Ltd are entities associated with Vodafone.
- 16.6% of TSM NZ Ltd, a "mobile wallet" joint venture company. 2Degrees and Vodafone also each hold 16.66% of TSM NZ Ltd.

CONFIDENTIAL APPENDIX TWO

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## APPENDIX THREE

## GLOSSARY OF TERMS

The following is a brief description of the technologies and equipment that can be used to improve network performance:

Technology	Description
<b>Sectorisation</b>	Adding equipment to an existing site so that spectrum is re-used across different areas (sectors) around that site
<b>Additional sites</b>	Building a new cell-site with new equipment
<b>4x4 MIMO</b>	Using multiple antennas to allow multiple signals to be transmitted simultaneously, so increasing available capacity
<b>MU-MIMO</b>	Using multiple antennas to allow multiple users to share the same time/frequency combination simultaneously with sufficiently low interference
<b>Small Cells</b>	Cheaper, smaller base stations that allow targeted provision of cellular capacity usually to locations with poor coverage or concentrated demand
<b>Joint Processing</b>	Two or more cell-sites working together to co-ordinate their signals so that users in marginal coverage conditions can benefit from connecting to more than one site at a time
<b>Carrier Aggregation</b>	Combining two or more frequency bands (carriers) together so that data can be transmitted on all bands at once thereby increasing peak data rates
<b>Active Antennas</b>	Embedding power amplifiers (PAs) inside antennas which reduces the transmission losses between separated PAs and antennas thereby improving signal strength

CONFIDENTIAL APPENDIX FOUR

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