PUBLIC VERSION

Vodafone New Zealand Limited

Clearance Application

Date: 12 July 2012

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

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

EXECUTIVE SUMMARY

The Application	Vodafone New Zealand Limited (**Vodafone**) (or any interconnected body corporate of Vodafone) seeks clearance to acquire up to 100% of the shares and/or assets of TelstraClear Limited (**TelstraClear**) from Telstra Corporation Limited (**Telstra Corporation**). Vodafone will not be acquiring all of TelstraClear's spectrum assets as part of the transaction (as described further in the body of the document).
Acquisition combines two complementary businesses	The acquisition of TelstraClear by Vodafone will combine two complementary businesses with limited overlap. Vodafone's network and expertise is centred primarily on mobile services, while TelstraClear's network and experience is based on fixed line services. Vodafone's market share in each of the fixed voice and broadband markets is **[ ]** (by connections). TelstraClear does not operate a mobile network, and has **[ ]** market share (by connections) as a reseller of mobile services on Vodafone's network. For business customers, Vodafone currently provides mobile services and a limited range of fixed network services. TelstraClear is currently able to offer a more extensive range of fixed network services to business customers than Vodafone, but lacks deep mobile expertise. The combination of the two businesses overcomes weaknesses in each company's product portfolio and creates an entity better able to compete against Telecom/Gen-i, particularly for large customers with complex needs. For consumers and small businesses the acquisition will combine TelstraClear's hybrid fibre-coaxial (**HFC**) cable network in Wellington and Christchurch and Unbundled Copper Local Loop (**UCLL**) networks in the rest of the country with Vodafone's UCLL network which is primarily focused on Auckland. Vodafone and TelstraClear also both resell Chorus' Digital Subscriber Line (**DSL**) bitstream services on a national basis (representing over **[ ]** of Vodafone's total DSL connections and over **[ ]** of TelstraClear's) in competition with a number of other players who do the same.
Acquisition will not substantially lessen competition in any market	Post acqusition, Vodafone will hold less than **[ ]** share (by connections) in each of the national fixed voice and national fixed broadband markets and will face competition from Telecom, the clear market leader, and from a wide range of other network and resale based competitors such as Orcon, Compass and CallPlus who obtain access to the Chorus copper networks on the same terms as Vodafone and TelstraClear. The Ultra-Fast Broadband (**UFB**) rollout of fibre will ensure smaller fixed line Retail Service Providers (**RSPs**) can continue to compete on equal terms with Vodafone and with Telecom. TelstraClear and Vodafone have overlapping DSL assets in **[ ]** exchanges and there is overlap between a further**[ ]**areas where Vodafone serves customers from exchanges it has unbundled and TelstraClear serves customers from its HFC network. However, at least **[ ]** of these **[ ]** overlap exchange areas have been unbundled by another competitor, such as CallPlus/Slingshot, Kordia/Orcon or Compass. Vodafone will continue to compete against Telecom, against these other unbundlers, and against other providers who resell Chorus' bitstream services. The acquisition will have negligible impact on competition in the mobile market. TelstraClear does not have its own mobile network and currently has a **[ ]** market share (by connections) through its Mobile Virtual Network Operator

	(**MVNO**) offering. Vodafone will continue to compete with Telecom and 2degrees, the latter having successfully grown to **[ ]** of mobile connections since its launch in August 2009. Vodafone will continue to provide wholesale services to 2degrees, M2, Kordia/Orcon and potential new entrants, as well as continuing to provide wholesale services over fixed line infrastructure. Vodafone will acquire additional radio spectrum as a result of the acquisition, which will **[ ]**. TelstraClear does not currently utilise this spectrum. Telstra Corporation will retain some spectrum in the 1800 MHz and 2100 MHz bands that can be used for mobile telephony. Vodafone's acquisition of spectrum will not affect the ability of other mobile providers to compete and will ensure that Vodafone will remain within established regulatory caps. Indeed Vodafone expects that Telstra Corporation will offer retained radio spectrum for sale which will allow other providers to increase their spectrum holdings.
Acquisition will improve Vodafone's ability to compete	Combining Vodafone's and TelstraClear's customer bases will allow Vodafone to migrate customers currently being served from wholesale Chorus products to TelstraClear's UCLL or HFC infrastructure, where this meets customer needs. This immediately decreases the costs to Vodafone of servicing these customers, which will be to the ultimate benefit of customers. The acquisition increases Vodafone's incentives to unbundle additional exchanges. Vodafone has identified a number of additional exchanges that it will likely unbundle or in which it will increase existing UCLL capacity as a result of the acquisition. This will increase Vodafone's competitiveness in the provision of fixed voice and internet services. For business customers, the transaction enables Vodafone to offer more complex fixed line solutions to a greater range of customers. For those customers who prefer to single source fixed and mobile solutions, the transaction will create a credible competitor to Telecom/Gen-i. The acquisition will generate other variable cost synergies. For example, **[ ]**
New Zealand's changing telecommunications landscape	The acquisition takes place against the backdrop of a telecommunications market which has undergone and will continue to undergo significant changes. In the fixed network market, the advent of UCLL and the subsequent separation of Telecom and Chorus have significantly reduced barriers to competition in markets which remain dominated by Telecom. By November 2011, eight new competitors - including Vodafone and TelstraClear - had unbundled 149 exchanges serving 90% of urban lines. At the time of filing this application, the Applicant understands that 163 exchanges around New Zealand have been unbundled. However, Telecom remains (and will remain post-acquisition) the largest retail fixed service provider in New Zealand, and continues to dominate in every segment. Furthermore, UFB will provide opportunities for both new and existing competitors in the market. UFB will remove access network scale advantages for RSPs because RSPs will have access to the UFB network on an equal basis irrespective of size. Smaller RSPs will be able to more effectively challenge Telecom's incumbent position and that will increase competition for customers.

Clearance should be granted	The proposed acquisition will not, and will not be likely to, result in a substantial lessening of competition in any market. Accordingly, the acquisition should be cleared.

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PART 1: TRANSACTION DETAILS

1. The acquirer: Vodafone New Zealand Limited

1. This notice is given by Vodafone New Zealand Limited (**Vodafone** or the **Applicant**). Vodafone's contact details are:

Vodafone New Zealand Limited

Level 1
20 Viaduct Harbour Avenue
Private Bag 92 161
Auckland 1030

Attention: Zac Summers
Telephone: **[ ]**
Fax: (09) 355 2001
Email: zac.summers@vodafone.com

2. Vodafone requests that all correspondence is directed in the first instance to:

Bell Gully
Vero Centre, 48 Shortland Street
PO Box 4199
Auckland 1140

Attention: Phil Taylor, Partner
Telephone: (09) 916 8940
Fax: (09) 916 8801
Email phil.taylor@bellgully.com

3. Vodafone is 100% owned (indirectly) by Vodafone Group Plc. A copy of the group structure chart is attached as **Annexure C.**

2. The seller: Telstra Corporation Limited

4. Telstra Corporation Limited (**Telstra Corporation**) is a company incorporated in Australia.

Telstra Corporation Limited

Level 38, 242 Exhibition Street
Melbourne, Victoria 3000
Australia

Attention: Fiona Robson / Mick Sheehy
Telephone: + 61 2 8576 9949 / + 61 3 8647 9185
Fax: + 61 2 9283 4782 / + 61 3 9639 4785
Email: fiona.robson@team.telstra.com / mick.sheehy@team.telstra.com

5. Telstra Corporation requests that all correspondence is directed in the first instance to:

Gilbert+Tobin
2 Park Street
Sydney, NSW 2000
Australia

Attention: Simon Snow, Partner
Telephone: +61 2 9263 4246
Fax: +61 2 9263 4111
Email SSnow@gtlaw.com.au

6. A copy of TelstraClear's structure chart is attached as **Annexure D.**

3. Interconnected and associated companies

TNAS Limited

7. TNAS Limited is a joint venture company held in equal parts by Telecom New Zealand Limited, Vodafone and TelstraClear.

8. TNAS Limited manages the toll free number portability service which allows a customer to change their telecommunications service provider while retaining the same toll free number. The joint venture has developed a common industry database system known as the TNAS System for the introduction of toll free number portability in New Zealand (which is governed by the Toll Free Database Access Agreement). This system co-ordinates the processes necessary for the allocation and porting of toll free numbers.

Digital Mobile

9. Vodafone owns approximately 25% of Centurion GSM Limited, trading as Digital Mobile. The remaining 75% is owned by Millennium Group Holdings Limited and Swan Holdings Limited. Digital Mobile operates around 100 retail outlets in New Zealand, both company owned and through channel partners. It has an agreement with Vodafone under which it distributes Vodafone's products through its stores.

4. The proposed acquisition

100% of the equity in TelstraClear Limited

10. The proposed acquisition will see Vodafone (or its nominee) acquire from Telstra Corporation 100% of the equity in TelstraClear Limited by way of a share sale agreement. 90 days after completion of the acquisition the parties will swap 2x15MHz of radio spectrum in the 1800MHz radio spectrum band (such that Vodafone's radio spectrum holding in the 1800MHz radio spectrum band is contiguous). The sale of spectrum is set out in further detail below.

Ongoing commercial relationship

11. **[ ]**

12. **[ ]**

13. **[ ]**

14. **[ ]**

15. **[ ]**

16. **[ ]**

17. **[ ]**

Spectrum

18. TelstraClear currently owns management rights and licences for:

    (a) **Radio spectrum that can be used for mobile telephony purposes:** 2x25MHz of 1800MHz band spectrum and 2x15MHz of 2100 MHz band spectrum (both FDD spectrum).

    (b) **Radio spectrum that cannot currently be used for mobile telephony purposes:** 1x5MHz of 2100 MHz (TDD spectrum); 2x28MHz[1] of 2GHz band microwave spectrum; and 2x21MHz of 3.5GHz band spectrum, all of which is currently unused. All licenses expire in 2021, with the exception of the 3.5GHz band spectrum which expires in 2022. TelstraClear also has eight licences for 25GHz+ spectrum, which are also currently unused and expire in 2018 (6 licences) and 2022 (2 licences).

19. Vodafone will not acquire all of TelstraClear's spectrum as part of the transaction. Rather:

    Spectrum for mobile telephony purposes:

    (a) Vodafone will increase its 1800MHz FDD band spectrum holdings from 2x15MHz to 2x25MHz. TelstraClear currently owns 2x25MHz of 1800MHz band radio spectrum. Immediately prior to the acquisition, TelstraClear will transfer 2x15MHz of 1800MHz band radio spectrum to another Telstra entity, meaning that Vodafone will acquire 2x10MHz of 1800MHz band radio spectrum initially. It will migrate its mobile traffic to this new spectrum over a period of 90 days. At the end of the 90 day period, Vodafone and Telstra Corporation will carry out a swap under which Vodafone will transfer its pre-existing 2x15MHz of 1800MHz band radio spectrum to Telstra Corporation in return for Telstra Corporation transferring its 2x15MHz of 1800MHz band radio spectrum to Vodafone. This swap will occur pursuant to a binding agreement entered into as part of the main transaction. Telstra Corporation will be free to sell the remaining 2x15MHz of 1800MHz band radio spectrum at its discretion.

    (b) Vodafone will increase its 2100MHz FDD band spectrum holdings from 2x15MHz to 2x25MHz by acquiring 2x10MHz of 2100MHz band radio spectrum. Immediately prior to the acquisition, TelstraClear will transfer 2x5MHz of 2100MHz band radio spectrum to another Telstra entity and Telstra Corporation will be free to sell the spectrum. This structure ensures that Vodafone will not exceed the 25MHz cap imposed by the Ministry of Economic Development (**MED**) on holdings of spectrum in the 2100MHz band.

    Other spectrum:

    (c) Vodafone will increase its holding of 2100MHz TDD radio spectrum from 5MHz to 10MHz and will acquire TelstraClear's 2x28MHz microwave spectrum in the 2GHz band (where it currently has no licences).

    (d) Vodafone will increase its 3.5GHz band spectrum holdings to 2x28MHz by acquiring TelstraClear's current 2x21MHz

[1] While the upper 28MHz band is actually 36.5MHz this spectrum in effect is equivalent to 2x28MHz.

The following table sets out pre and post acquisition spectrum entitlements:

Table 1: Spectrum for mobile telephony uses

Affected spectrum		Current	Final allocation*
1800 MHz FDD	**Vodafone**	2x15MHz	2x25MHz
	TelstraClear/Telstra Corporation	2x25MHz	2x15MHz
	Telecom	2x25MHz	2x25MHz
	2degrees	2x10MHz	2x10MHz
2100 MHz FDD	**Vodafone**	2x15MHz	2x25MHz
	TelstraClear/Telstra Corporation	2x15MHz	2x5MHz
	Telecom	2x15MHZ	2x15MHz
	2degrees	2x15MHz	2x15MHz

*As of 90 days post-completion

Table 2: Spectrum for other uses

Affected spectrum		Current	Final allocation*
2100 MHz TDD	**Vodafone**	1x 5MHz	1x10MHz
	TelstraClear/Telstra Corporation	1x 5MHz	0MHz
	CallPlus	1x 5MHz	1x 5MHz
2GHz Microwave link band	**Vodafone**	0MHz	2x28MHz
	TelstraClear/Telstra Corporation	2x28MHz	0MHz
	Whoosh	2x29MHz	2x29MHz
	Kordia	2x28MHz	2x28MHz
3.5 GHZ band (FDD)	**Vodafone**	2x7MHz	2x28MHz
	TelstraClear/Telstra Corporation	2x21MHz	0MHz
	Telecom	2x7MHz	2x7MHz
	Other	2x42MHz	2x42MHz

*As of 90 days post-completion

20. A diagram showing the existing wireless spectrum allocations in New Zealand is provided in section 5F.

5. Commercial rationale for the acquisition

21. Telstra Corporation has decided to sell its New Zealand business. Vodafone's rationale in buying the New Zealand business is based on the complementary nature of the two businesses and the cost synergies it can extract.

Combining two complementary businesses

22. Vodafone and TelstraClear's existing businesses are complementary as illustrated in the table below:

Table 3: Business complementarity

	Vodafone	TelstraClear
Mobile		
Network assets	• Nationwide 2G (GSM[2]) and 3G (UMTS[3]) mobile network from approximately 1500 cell sites providing mobile coverage to more than 97% of New Zealanders	• No mobile network in New Zealand
Mobile offering	• Wholesale and retail offer • Strong mobile offering for business	• MVNO on Vodafone – **[ ]** share by connections
Fixed and broadband		
Local access network and assets	• No local access network lines • **[ ]** unbundled exchanges: **[ ]** in Auckland, **[ ]** in Christchurch, **[ ]** in Wellington	• HFC network in Wellington/Kapiti and Christchurch covering **[ ]** homes and upgraded to 100Mbps • **[ ]** unbundled exchanges: **[ ]** • Copper and fibre business access networks in major metropolitan areas which connect over 6,000 buildings
Retail fixed voice and broadband offers	• Consumer strength focused in Auckland • Basic access solutions for business customers • Limited and simple access based business product range (including a basic Voice over Internet Protocol (**VoIP**) offering). More complex solutions (e.g., Wide Area Network (**WAN**), Private Branch Exchange (**PBX**) delivered via partners)	• Retail and wholesale offers • Consumer strength focused in Wellington/Kapiti and Christchurch • Advanced business product set: including VoIP DSL, Very High Speed Digital Subscriber Line (**VDSL**), hosting and value added internet solutions • Strong fixed line access and value added services offering for business customers via Fibre, WAN/Local Area Network (**LAN**), Internet Protocol (**IP**), PBX and Centrex solutions
Backbone transmission and network assets		
Backbone transmission network and offer	• No material ownership of backbone or transmission assets	• Nationwide backbone and transmission assets • Internet Protocol Television (**IPTV**) multicasting and content caching • TV headend ingest and delivery

23. The following chart demonstrates the complementary nature of the parties' market presence and their low revenue share of the markets relative to the market leadership of Telecom:

[2] On the 900 and 1800 megahertz parts of the wireless spectrum.

[3] On both 900 and 2100 megahertz wireless spectrum.

[ ]

24. Given the complementary nature of the two businesses, Vodafone aims through the transaction to:

    (a) provide a better consumer broadband offering by migrating Unbundled Bit-stream Access (**UBA**) customers to TelstraClear's HFC networks in Christchurch and Wellington and to both parties' existing UCLL assets elsewhere, but also by unbundling additional exchanges and migrating UBA customers onto them;

    (b) increase the range of products and services it is able to provide to business customers - in particular data management, storage and security - in order to better serve their requirements including those customers who prefer to single source mobile and fixed services. In so doing, Vodafone expects to become a stronger competitor to the clear leader, Telecom/Gen-i, and to grow its business in the business segment;

    (c) increase its wireless spectrum allocation in order to decrease future capital expansion costs, improve customer experience by delivering greater capacity **[ ]**; and

    (d) realise cost synergies.

25. Accordingly, while providing a strong rationale for Vodafone to enter into this transaction, the combination of the two complementary businesses will also strengthen Vodafone as a competitive force in provision of both telecommunications and IT products for the benefit of customers.

26. The Application expands on each of these aspects of Vodafone's rationale below:

Improving Vodafone's offering to consumers

UFB and UCLL

27. As the consumer broadband market changes with the rollout of UFB and the penetration of new services such as **[ ]**, the transaction will enable Vodafone to improve its offering to customers via the UCLL and HFC assets it will acquire.

28. The advent of UCLL has seen increased competition in the fixed and broadband market for the benefit of consumers and business users. Vodafone and TelstraClear, along with a number of other unbundlers, have taken advantage of the opportunity to unbundle exchanges and offer their own voice and broadband products to consumers.

29. The rollout of UFB introduces a new access technology into the New Zealand market place in addition to copper and TelstraClear's HFC network (in Wellington/Kapiti and Christchurch). The rollout will occur over the next 7 years. Where UFB is rolled out:

    (a) the cost of providing products over UFB is lower than the price that RSPs currently pay Chorus for UBA products (which are inferior to UFB). Accordingly, RSPs are unlikely to continue re-selling UBA products (unless there is a substantial decrease in the wholesale price);

    (b) where RSPs have existing UCLL assets, they will be likely to compete on price - at least for a period - in order to maintain customers on UCLL (these investments being already sunk); and

    (c) where RSPs have existing HFC assets, they will be even more likely to compete on price in order to maintain customers on HFC networks given that these assets are

owned (rather than rented from Chorus), these investments are already sunk and similar speeds can be achieved over HFC networks (as compared to those on UCLL).

30. Accordingly, DSL over copper and access via the HFC networks will remain important competitive constraints on the pricing of retail fibre-based products.

31. Nevertheless, the likelihood that many consumers will be encouraged to see the UFB rollout as a time to reassess their product demands provides an opportunity for RSPs to challenge Telecom's existing strong position.

Copper and HFC

32. The business case for UCLL investment rests on whether the additional revenue derived from a lower access cost (including backhaul) is sufficient to cover the capital investment needed to unbundle exchanges. The revenue return itself is a function of the number of users that an unbundler attracts. In addition, unbundling further exchanges becomes less attractive as UFB rollout draws nearer.

33. Currently, **[ ]** of Vodafone's broadband customers are supplied by Vodafone reselling a wholesale UBA+ Plain Old Telephone (**POTS**) service acquired from Chorus[4], with the remaining **[ ]** served from Vodafone's unbundled exchanges. **[ ]** of TelstraClear's customers are supplied by a wholesale UBA+POTS service, with **[ ]** supplied via UCLL and **[ ]** from its HFC network.

34. The immediate benefit of the merger is that Vodafone will look to migrate existing UBA+POTS customers onto UCLL (largely existing TelstraClear customers in Auckland) or HFC (largely existing Vodafone customers in Christchurch and Wellington) where these exist and meet customer needs. This means that post-merger Vodafone would expect the number of customers to be supplied by UBA+POTS service to fall to less than **[ ]**. Customers on UCLL or HFC platforms will have significantly lower variable costs as monthly rental fees to Chorus will be avoided. Given the variable cost nature of the savings and the competitive nature of the market, customers are likely to gain from these cost savings.

35. The combination of the two businesses also creates greater customer density, improving the economics of unbundling further exchanges and increasing capacity in exchanges that Vodafone or TelstraClear has already unbundled. This allows Vodafone to service those customers at a lower cost than would be the case without the transaction. However, it also benefits consumers in the long run as unbundled exchanges continue to provide a competitive constraint on fibre pricing following the rollout of UFB. Vodafone has identified a business case for unbundling **[ ]** additional exchanges and for expanding existing equipment in **[ ]** exchanges post acquisition.

Improving Vodafone's business offering

36. TelstraClear has an extensive product offering for business customers covering fixed access, data and voice services, and data security, management and storage services. However, its mobile offering for business customers is limited. Vodafone has only basic fixed access services. It provides data management, storage and security capabilities only through partnerships. Therefore, the acquisition will allow Vodafone to access a broader base of customers who require more complex solutions. In addition, a proportion of (primarily large) business customers seek to single-source fixed and mobile solutions. The acquisition will allow Vodafone to establish itself as a credible competitor to Telecom/Gen-i for such customers.

Business customers are increasingly seeking to outsource their IT and telecommunications requirements. This is pushing suppliers to extend the scope of their activities. Advanced

[4] Meaning that Vodafone acquires wholesale internet and fixed line services from Chorus and on-sells these to the customer (rather than servicing the customer from Vodafone's own hardware as occurs in exchanges that Vodafone has unbundled).

system integrators (such as IBM and Unisys) are moving into data management and telecommunications services while telecommunications service providers are moving into data management and IT, either by developing the necessary expertise themselves or by entering into partnering arrangements.

Material cost synergies to the ultimate benefit of end-users

37. The acquisition would generate significant cost synergies comprising both fixed and variable cost savings. The primary cost synergies are:

    (a) **[ ]**;

    (b) reduced costs by overlaying TelstraClear's network and UCLL footprint (Vodafone will no longer need to acquire wholesale access from Telecom - as discussed above);

    (c) payroll savings (primarily from removal of duplication of management);

    (d) reduced network management and internal IT expenses;

    (e) reduction in other operating costs (e.g., travel).

38. Given the competitive conditions in the overall market, the benefit of these cost savings can be expected to flow through to customers.

39. These savings are discussed in more detail in the response to Question 30 set out below.

Spectrum

40. As set out in greater detail in Part 4 (above) and discussed with respect to mobile services in section 5F (below), Vodafone will acquire some of TelstraClear's spectrum as part of this transaction.

41. The additional spectrum acquired will **[ ]**and enhance its 3G network for the benefit of customers. More wireless spectrum capacity means less need for cell sites. Additional spectrum will enable Vodafone to avoid the cost of building additional cell sites particularly in metro areas where demand for capacity is increasing. Vodafone expects spectrum savings to amount to around **[ ]**

6. Transaction documents

42. The Share Sale Agreement is attached as **Annexure E**. **[ ]**

7. No material overseas dimension

43. Following announcement, the ACCC will be informally notified of the acquisition as a matter of courtesy, although no competition issues will arise in Australia as a result of the transaction.

PART 2: THE INDUSTRY

8. Services supplied by Vodafone and TelstraClear

Vodafone

Mobile services

44. Vodafone has been, to date, primarily a mobile operator in New Zealand. It operates a nationwide 2G (GSM[5]) and 3G (UMTS[6]) mobile network from approximately 1,500 cell sites providing mobile coverage to more than 97% of where New Zealanders live, work and play.

45. Supporting its mobile offer it has a distribution network comprising more than 800 outlets retailing Vodafone goods and services throughout New Zealand.

46. It operates at the wholesale level selling wholesale services to other providers such as TelstraClear and other MVNOs and provides national roaming services to 2degrees.

Fixed voice and broadband

47. In contrast to its mobile offering, Vodafone delivers only a limited range of fixed solutions. Vodafone offers residential access, broadband and voice services as part of a bundle (and also offers a standalone broadband product which can be bundled with on-account mobile (naked DSL)).

48. Since the advent of local loop unbundling in 2008 Vodafone has invested in UCLL in **[ ]** exchanges (**[ ]** in Auckland, **[ ]** in Christchurch[7] and **[ ]** in Wellington) and in reselling wholesale services in urban areas of New Zealand where it has not unbundled. Vodafone estimates its share of the fixed voice market is **[ ]** and its share of the fixed broadband market is **[ ]** nationwide with a particular strength in Auckland.

49. Vodafone sells access services to **[ ]** where Vodafone has unbundled an exchange but **[ ]** has not. **[ ]**

50. The fixed lines services demanded by, and offered to, small businesses are largely the same as those demanded by consumers, albeit that the product characteristics and features of a product may be packaged in a different way.

51. With respect to the provision of these services to larger businesses, Vodafone does not have the internal expertise, assets and capability to deliver the broad product range required by many customers. Its fixed and broadband business package "Easy Office" provides 2 fixed VoIP lines and one POTS line making it suitable for very small businesses with basic requirements. Vodafone does also offer legacy Integrated Services Digital Network (**ISDN**) products which offer a greater number of connections, however, this is only through reselling a wholesale product purchased from either Telecom or TelstraClear. In addition, Vodafone intends to **[ ]**

52. **[ ]** However, even with these new products, Vodafone's offering for larger business customers remains limited. Additionally, it will take time to build the skills and credibility to deliver these solutions to customers.

[5] On the 900 and 1800 MHz bandwidths of the radio spectrum.

[6] On both 900 and 2100 MHz bandwidths of the radio spectrum.

[7] Vodafone had previously unbundled an additional 2 exchanges in Christchurch, but these are permanently out of commission due to earthquake damage and Vodafone has removed the DSLAMs from these exchanges.

53. Vodafone does not itself have the complex fixed voice and data solutions for larger business customers. Vodafone does have the ability to offer limited WAN and PBX business services, however, these services are only provided via partnerships with other providers.

54. Vodafone's presence at the large enterprise end of the industry is and will remain primarily as a partner of other providers or as a provider of mobile services to customers through outsourcing and procurement processes run by systems integrators such as Dimension Data, IBM etc.

TelstraClear

55. TelstraClear primarily provides fixed voice and data/broadband solutions.

Fixed voice and broadband

56. TelstraClear owns and operates an HFC access network which covers the Wellington and Christchurch CBDs and surrounding suburbs and also covers the Kapiti region near Wellington. This access network services approximately **[ ]** households. This network is capable of delivering services at up to 100Mbps downstream (comparable with the initial UFB standards).

57. TelstraClear has also invested in unbundling approximately **[ ]** local exchanges, which supplement its HFC network. These include **[ ]**. In other areas it resells Telecom wholesale/Chorus wholesale services. TelstraClear does not sell wholesale residential access services to other RSPs over its HFC network or UCLL. TelstraClear does resell Chorus UBA services to RSPs as part of its Virtual Internet Service Provider (**ISP**) product, which could be provided to residential customers.

58. In addition to voice and data services, TelstraClear offers a cable TV product. TelstraClear acquires packaged content from Sky TV and then retransmits those packages via its cable network. In addition, TelstraClear provides its own Pay-Per-View movies service and a small quantity of niche content on its cable network.

59. TelstraClear has experience and expertise in delivering complex fixed network solutions and data storage, management and security services to businesses. It operates a dense CBD network including business cabinets, and data centres in Auckland, Wellington and Hamilton. Its customers include banks, government departments, universities, leading retail chains and media companies. Both retail and wholesale services are offered over this network.

Backbone transmission and international connectivity assets

60. TelstraClear operates a predominately fibre backbone transmission network with 9,000 km of cable including undersea links. North Island and South Island fibre rings[8] provide redundancy.[9]

61. TelstraClear is a wholesale provider of international backhaul services (based on access to the Southern Cross cable which is owned by third parties including Telecom). It also provides trans-Tasman retail services over the Southern Cross and Tasman II cables.

Mobile offering

62. TelstraClear is an MVNO in the mobile market via its wholesale agreement with Vodafone. It also owns 2x25MHz of 1800MHz band spectrum; 2x15MHz and 1x5MHz of 2100 MHz band

[8] A fibre ring is a network where each node connects to two other nodes, forming a single pathway for signals through each node. TelstraClear's fibre ring was completed in January 2008 and connects all of the South Island's main cities and centres. http://www.telstraclear.co.nz/company-info/media-release-template.cfm?newsid=332&myear=2008.

[9] TelstraClear offers the redundancy as part of its wholesale co-location data centre package. Redundancy refers to a network designed to enhance reliability and eliminate downtime caused by a single point of failure. On a redundantly connected network, if a router fails, connectivity is preserved by routing traffic through the 'redundant connection'.

spectrum; 2x28MHz of 2GHz band spectrum[10]; and 2x21MHz of 3.5GHz band spectrum, all of which is currently unused. All licences expire in 2021, with the exception of the 3.5GHz band spectrum which expires in 2022. TelstraClear also has 8 licences for 25GHz+ spectrum, which are also currently unused and expire in 2018 (6 licences) and 2022 (2 licences).

9. New Zealand's telecommunications industry

63. The major telecommunications participants today, in addition to Vodafone and TelstraClear, are well known to the Commission but for completeness are listed below.

[10] See footnote 1 above

Supplier	Mobile Voice and Data	Fixed Voice and Data
vodafone	**Network** • Nationwide 2G and 3G mobile networks • Owns 2x15MHz of 900MHz, 2x15MHz of 1800MHz and 2x15MHz of 2100MHz of wireless spectrum which can be used for mobile telephony **Offer and target market** • Full mobile offering targeted at both consumers and business, with relative market share strength in consumer • Nationwide retail distribution network • Wholesale provider to several MVNOs and 2Degrees • Estimated [ ] market share (by connections)	**Network** • [ ] UCLL exchanges nationwide (primarily in Auckland) • Resells wholesale services in urban areas of New Zealand where it has not unbundled UCLL **Offer and target market** • Basic fixed voice access, calling and broadband services for consumer and small business • PBX, WAN, and other complex services for businesses supplied partnering arrangements • Offer targeted at consumers and small businesses, with relative strength in consumer and Auckland region • Estimated [ ] market share in both fixed line voice and in fixed line broadband market (by connections)
TelstraClear	**Network** • No mobile network in New Zealand. MVNO from Vodafone • Owns 2x25MHz of 1800MHz and 2x15MHz 2100MHz wireless spectrum licenses which can be used for mobile telephony **Offer and target market** • Basic mobile offer targeted at both consumers and business • Estimated [ ]market share of mobile market (by connections)	**Network** • [ ] UCLL exchanges nationwide, and resells wholesales services from Telecom / Chorus • HFC network which covers the Wellington/Kapiti and Christchurch regions • Dense CBD fibre network including business cabinets and data centres in Auckland Wellington and Hamilton (resale and wholesale services are offered on this network) **Offer and target market** • Basic and fixed voice access, calling and broadband services • Extensive range of fixed line based business packages (eg PBX, WAN services, data storage and management, some IT Services) • Offer targeted at consumers, small business, and large enterprise customers, with relative strength in Wellington and Christchurch • Estimated [ ] market share in fixed line broadband, and [ ] share in fixed voice (by connections)
telecom gen-i	**Network** • Nationwide mobile network supported by retail distribution network • Owns 2x15MHz of 850MHz, 2x25MHz of 1800MHz, 2x15MHz of 2100MHz wireless spectrum which can be used for mobile telephony **Offer and target market** • Full mobile offering targeted at both consumers and business, with relative strength in large enterprise • Managed voice and data mobility services for large businesses (eg PBX functionality) • Wholesale provider to several MVNOs • Estimated [ ] market share of mobile market (by connections)	**Network** • Nationwide fixed line and broadband service coverage via wholesale services agreement with Chorus • Backbone transmission network (shared access with Chorus) • Dense CBD fibre network • Major network infrastructure (e.g., data centres, switching) assets throughout New Zealand **Offer and target market** • Basic and value-add fixed voice access, calling and broadband services • Extensive range of fixed line business packages and IT Services, including o managed voice services (network-based PBX voice products and services, including hosted call centre solutions, IP-based networks, VoIP, and videoconferencing); and

Supplier	Mobile Voice and Data	Fixed Voice and Data
		o managed data services (network delivered and managed products and services, including Gen-i WAN Services and remote-managed LAN and WAN services) • Provides wholesale access services (eg POTS, ISDN services) • Estimated 64% market share in fixed voice, and 48% market share in fixed line broadband (by connections) • Telecom/Gen-i have largest share of NZ IT Services market (source: Telecom annual report)
Chorus		**Network** • Owner of majority of New Zealand fixed line copper access networks, including all local telephone exchanges • Contracted with Crown Fibre Holding to build fibre to the home network covering 52% of New Zealand population • Shared access to Telecom's backbone transmission network **Offer and target market** • Wholesales fixed line access services to retail service providers • Market share of approximately 93% of New Zealand's fixed line access market (by connections)
FXnetworks		**Network** • Owns and operates national inter-city backhaul fibre optic network for Auckland, Wellington and Christchurch **Offer and target market** • Fibre based WAN services, Internet access for businesses and retail service providers • Backhaul and carrier transmission services for other retail service providers • Target market of large businesses and telecommunications retail service providers • Partners with IT Service providers to provide integrated IT and telecommunications services solutions, e.g. Dimension Data partnership to deliver one.govt[11] integrated communications project for central government agencies
Vector communications		**Network** • Operates open access fibre optic network for Auckland CBD, and areas of North Shore, West Auckland and Manukau City and Wellington and Christchurch CBDs **Offer and target market** • Partners with the local metro data circuit providers (e.g., Enable Networks or Chorus) to provide last mile connectivity to large businesses • Partners with retail service providers (e.g., Kordia, Maxnet) and IT Service providers (Datacom)

[11] This is an integrated telecommunications service WAN, secure WAN, internet access, email and web protection, and a voice gateway that currently connects more than 700 offices from over 30 agencies including Department of Conservation, Ministry of Education, New Zealand Police and Department of Labour.

Supplier	Mobile Voice and Data	Fixed Voice and Data
		to provide customer solutions to large businesses
Woosh		**Network** • Fixed wireless network based on 135 cell sites in Auckland, Wellington, Christchurch and the Southland region, providing coverage to more than 200,000 households, through various wholesale partnerships • Resells wholesales fixed line services from Telecom / Chorus • Owns 2 x 29Mhz of 2GHz spectrum and 1x35MHz of 2.3GHz spectrum **Offer and target market** • Basic voice, calling and broadband services, provided over both fixed line and fixed wireless networks • Targets both consumer and business., typically with low cost offer
kordia orcon	**Network** • MVNO on Vodafone 2G and 3G networks **Offer and target market** • Full consumer voice and mobile broadband offer • Targeted at consumer	**Network** • 53 UCLL exchanges nationwide (which it pools with Compass) • National backbone network comprising point to point microwave links and optical fibre (predominantly used between Christchurch and Invercargill) **Offer and target market** • Full consumer voice, calling and broadband offer, incluing consumer VoIP product • Extensive range of fixed line based business packages which including managed voice services (e.g., VoIP with PBX replacement, teleconferencing) and managed data services (e.g., Managed WAN services, transport networks, managed LAN services) • Wholesales transmission services (e.g., broadcast TV, MNO backhaul) • Estimated 3% market share in fixed voice and 7% market share in fixed line broadband (by connections)
2degrees	**Network** • Nationwide 3G mobile network (which is supplemented by roaming on Vodafone networks) • Estimated [ ] market share of the mobile market (by connections) • Owns 2x20MHz of 900MHz, 2x10MHz of 1800MHz and 2x15MHz of 2100MHz wireless spectrum licenses which can be used for mobile telephony **Offer and target market** • Full mobile offering targeted at both consumers and business, with relative strength in consumer (prepay) market • National retail distribution network	

Supplier	Mobile Voice and Data	Fixed Voice and Data
	• Authorised to sell mobile voice and data solutions to government agencies, under the All-of-Government initiative	
compass communications	**Network** • MVNO on Vodafone's 2G and 3G networks **Offer and target market** • Full consumer voice and mobile broadband offer	**Network** • Wireless terrestrial network providing broadband and calling services in greater Auckland, Hamilton, Tauranga, Christchurch, Dunedin and various smaller cities • Resells wholesales services from Telecom / Chorus • Operates voice and data switching centres in Auckland, Wellington and Christchurch **Offer and target market** • Complete voice, calling and data solutions to consumers and businesses, with relative strength in the fixed calling market • Hosted IT services and website development and hosting through its ZeroOne business
CallPlus slingshot	**Network** • MVNO on Telecom's 3G network (migrated from Vodafone in 2011) **Offer and target market** • Full voice and mobile broadband offer for both business and consumer • Mobile SIP service, enabling low cost VoIP calling on mobile phones	**Network** • [ ] UCLL exchanges nationwide (access to a total of around [ ] unbundled exchanges nationwide including those accessed via pooling arrangements with Orcon and Compass) • Acquires wholesale services from Vodafone unbundled exchanges **Offer and target market** • Full consumer voice, calling and broadband offer. Slingshot brand targeted effectively at price-sensitive consumers • Full suite of business network services products including PSTN services, managed voice services (e.g. VoIP, SIP trunking), managed data services (e.g., Managed WAN). • Estimated 8% market share in fixed line broadband, and 4% in fixed voice (by connections), with over 150,000 customers

Supplier	Mobile Voice and Data	Fixed Voice and Data
(WorldxChange)		**Network** • Operates carrier grade core IP network, carrying data (including VOIP/SIP calls) originating from a variety of access networks (eg DSL, Fibre). Access network services are purchased from other wholesale providers (eg Chorus) • No major access network assets **Offer and target market** • Business data and voice solutions, including managed voice solutions (e.g., VoIP services, SIP trunking), and managed data services (e.g., Managed WAN, VPN services) • Consumer access, voice and broadband solutions via Xnet ISP brand • Partners with other IT Service providers, eg Dimension Data, to provide customer solutions • Third largest provider of fixed line toll services in New Zealand (behind Telecom and TelstraClear) with relative strength in small – medium business markets
	Network • MVNO on Telecom's 3G network **Offer and target market** • Full voice and data offer for both consumer and business • Relative strength in South Island market	**Network** • No major access network assets. Purchases wholesales services from other providers (e.g. Chorus, Telecom Wholesale) **Offer and target market** • Basic consumer access, voice and broadband solutions • Complex business fixed line services, including data management services (e.g., Managed WAN, security) and voice services (e.g., SIP, PSTN) • Wholesale data center, IP transport and WAN services • South Island focused fixed voice and broadband provider, with relative strength in small-medium businesses
		Network • No major access network assets. Purchases wholesale services from other providers (e.g. Telecom Wholesale) **Offer and target market** • Basic consumer and business voice, calling and broadband services • 38,000 fixed line voice and broadband services to 25,000 residential and business customers
		Network • No major access or backbone network assets in New Zealand **Offer and target market** • Offer an extensive range of fixed line based business packages which including o VoIP calling services; o Managed data services;

Supplier	Mobile Voice and Data	Fixed Voice and Data
		o Sophisticated unified communications and integration services; and o LAN/WAN co-location services • IT services market share leader alongside Telecom/Gen-i (source: IDC)
dimension data		**Network** • No major access or backbone network assets in New Zealand **Offer and target market** • Offer business a range of fixed line based services • Data Centre business solutions which comprise of networking (wireless and fixed), data management, desktop and server virtualisation as well as converged communications products, enterprise mobility services and visual communications • Developed the one.govt project in partnership with FX Networks (for which the client was the Department of Internal Affairs)
DATACOM		**Network** • No major access or backbone network assets in New Zealand **Offer and target market** • Range of fixed line based services for businesses • Delivers unified communications (UC) including IP telephony, VoIP and traditional telephony • Offers business process outsourcing services, software integration services, IT consulting and procurement and data management services • One of IT Services top five providers by market share (source: IDC)
IBM		**Network** • No major access or backbone network assets in New Zealand **Offer and target market** • Offer a range of fixed line based business packages for large enterprises which include the following products: o VoIP calling services for business to business; o Managed data services; o Sophisticated unified communications and integration services; and o LAN/WAN co-location services • One of IT Services top five providers by market share (source: IDC)
UNISYS		**Network** • No major access or backbone network assets in New Zealand **Offer and target market**

Supplier	Mobile Voice and Data	Fixed Voice and Data
		• Offer a range of fixed line based IT Service packages for large enterprises, focusing on network management services, data center services, end-user outsourcing and support, and application outsourcing • One of IT Services top five providers by market share (source: IDC)

Local Fibre Companies

64. The following Local Fibre Companies (**LFC**s) have contracts with Crown Fibre Holdings Limited. These companies are prevented from supplying telecommunications products to end-users, and must offer services to RSPs on an open access basis, thus playing a central role in the future competitive landscape:

    (a) Chorus: accounting for 24 of the 33 UFB regions including Auckland and Wellington;

    (b) Ultrafast Fibre: Hamilton, Te Awamutu, Cambridge, Tauranga, Tokoroa, New Plymouth, Hawera and Wanganui;

    (c) Northpower: Whangarei;

    (d) Enable, a LFC in the Christchurch region, which is owned by the Christchurch City Council.

10. Recent and future trends

65. New Zealand's telecommunications market, like markets around the world, has evolved considerably over the last three decades as a result of regulatory changes, new technologies and changing customer preferences.

66. The changes commenced with the deregulation of the telecommunications market and the privatisation of the then state monopoly provider Telecom. The regulatory environment has continued to evolve with the operational separation of Telecom and the advances gained through UCLL.

67. As the table above illustrates, there are many providers in New Zealand. However, Telecom remains the largest participant in most markets.

68. The full structural separation of Telecom and Chorus, UCLL and the UFB and Rural Broadband Initiatives (**RBI**) provide further catalysts for change in the industry over the next few years and provide confidence that competition will continue to increase over time, particularly given the way in which UCLL access is priced compared to UFB and UBA.

Impact of unbundling

69. Unbundling allows access seekers to lease Chorus' unbundled copper local loop. This allows an access seeker to design and offer its own voice and broadband services to end users. Unbundling provides a form of facilities based access competition, which substitutes for full scale access network investment.

70. As of 30 November 2011, 149 local exchanges accounting for around 6% of access lines have been unbundled covering most of New Zealand's metro and urban areas.[12] Chorus reports Actrix, Araneo, Airnet, CallPlus, Compass, Orcon, TelstraClear and Vodafone as being its UCLL customers.[13] CallPlus has been the most aggressive unbundler, having unbundled 117 exchanges.

71. Unbundling has been focused on metro and major urban areas because the business case for unbundling rests on whether the cost savings from avoided UCLL fees is sufficient to cover the capital investment needed to unbundle the exchange (see above at paragraph 32).

[12] Dr Ross Patterson Speech to the International Telecommunications Union (ITU) Asia-Pacific Regulator's Roundtable, Melbourne, Australia, 7 November 2011.

[13] Telecom Annual Report 2011, page 20.

72. Furthermore, the price for full unbundled access currently differs according to whether an exchange is located in a metro area or a non-metro area. The metropolitan price is $19.84, while in non-metropolitan areas it is $36.63.

73. These factors have meant that Auckland – with its high customer density and relatively lower cost – has been a key target market for most unbundlers. Exchanges have not been unbundled outside of the main metro areas, primarily because of the higher (regulated) cost of access in those regions, the lower customer density and hence the lower returns available.

UBA access an alternative to unbundling

74. Chorus (via an agency agreement with Telecom) wholesales a clothed UBA product (i.e., naked UBA and traditional voice service).[14] The naked UBA price is constant across New Zealand ($21.46). However, the traditional voice price varies by region from $34.36 in Wellington and Christchurch to $37.80 in Auckland and $41.50 in the rest of New Zealand.[15]

75. RSPs can also acquire "naked UBA" from Chorus using Chorus installed broadband equipment. Using naked UBA, an RSP can provide a broadband product and VoIP products, but does not have the ability to provide a traditional voice service.

76. In short, while UBA enables an RSP to avoid the capital costs of unbundling a loop, the access cost of providing a traditional voice and broadband product is much higher, meaning that the contribution margin is much lower (**[ ]**) than on UCLL (**[ ]**).

Impact of UFB

77. The UFB initiative creates an open access UFB Fibre-to-the-premises (**FTTP**) network in urban areas covering 75% of New Zealand households and businesses through public-private partnership between the Crown and LFCs.[16] LFCs are prevented from simultaneously providing retail telecommunications services and prices are "regulated" via contractual agreements between the Crown and the relevant LFC. The structural separation between LFCs and RSPs provides an environment where all competitors can compete on a level playing field.

78. The UFB rollout will be completed by 2020 with the intention that all schools and hospitals in the coverage zone will be covered by December 2015. It is also expected that 90% of businesses in the coverage zone will be covered by December 2015.[17] Specifically in relation to TelstraClear's HFC network, a staged UFB rollout has started in Kapiti, Christchurch and Wellington, with the goal of completion by the end of 2019.[18]

79. UFB networks will provide a substitute for existing local access networks. However, RSPs will only be able to acquire the equivalent of a UBA service over fibre (and will be prevented from unbundling a UFB network until 2020).

80. UFB pricing will be set at a level that is likely to provide an incentive for RSPs who have invested in unbundling exchanges to compete to retain customers on copper (in order to earn a return on investments already made). Customers will benefit from this ongoing competition.

[14] Furthermore, the Telecommunications Act was amended to allow an RSP to gain access to the low frequency band of the copper line thereby enabling an RSP to add a traditional voice service to a naked UBA product (thereby avoiding the need to fully unbundle an exchange).

[15] The UCLF service will enable parties to reduce the access cost by around $13 (the UCLF access cost being a flat $24.46 across regions).

[16] Four LFCs have been selected: Enable (Christchurch), Northpower (2%), and WEL (Tauranga, Hamilton, New Plymouth), and Chorus (remainder) (see 64 above).

[17] http://www.crownfibre.govt.nz/media/13092/fact%20sheet%20-%20agreement%20with%20enable%20networks.pdf, p 5 http://www.crownfibre.govt.nz/media/13216/fact%20sheet%20-%20agreement%20with%20chorus.pdf, p 15 and 20.

[18] Crown Fibre Holdings web-site http://www.crownfibre.govt.nz/. Exact rollout dates for these areas are not yet official.

81. TelstraClear's HFC network is an acute example of this as it is capable of delivering broadband services which are superior to DSL, currently giving it a competitive advantage in those regions where it is offered. As UFB is rolled out in these areas this competitive advantage will, however, be eroded and price competition can be expected to increase. The HFC provider will seek to protect its market share, while new RSPs will seek to utilise fibre to compete.

11. Recent consolidation in the industry

82. The following consolidation has taken place in the industry in the past five years:

(a) TelstraClear purchased Sytec Resources Limited (2004)

(b) Woosh purchased Quicksilver (2006)

(c) Vodafone purchased ihug (2007)

(d) Kordia purchased Orcon (2007)

(e) Trilogy International Partners purchased 2degrees (2009)

(f) Orcon purchased Bizo (2010)

(g) Orcon purchased iGRIN and Infogen (2010)

(h) Craig Wireless purchased Woosh (2011)

(i) Vocus purchased Maxnet (2012)

PART 3: MARKET DEFINITION

Horizontal aggregation

12. Relevant markets

83. The Commission last considered the relevant markets in a merger context in 2001.[19] The services telecommunications providers offer and the manner in which they compete have developed significantly in New Zealand since that time.

84. However, the Commission has considered telecommunications markets in a number of regulatory decisions, drawing on market definition principles contained in its Mergers and Acquisitions Guidelines. Vodafone draws on these regulatory decisions for the purposes of this Application.

85. In broad terms, the acquisition will result in aggregation between:

    (a) Vodafone's and TelstraClear's fixed line infrastructure – i.e., the **[ ]**exchanges where both Vodafone and TelstraClear have unbundled the same exchanges or where there is overlap between a Vodafone unbundled exchange and TelstraClear's HFC network;[20]

    (b) Vodafone's and TelstraClear's *retail* fixed voice and broadband services to consumers and businesses;

    (c) retail mobile services, although TelstraClear's position in this market is very small, operating as an MVNO; and

    (d) wireless spectrum holdings.

86. There is no ownership aggregation in relation to backbone transmission or international connectivity. However, for completeness, these are described briefly below.

87. Vodafone has adopted market definitions which best examine the aggregations described above and which largely adopt the Commission's previous approach.

Aggregation in fixed line infrastructure

88. There are some geographic overlaps between Vodafone's and TelstraClear's fixed line infrastructure where both parties have unbundled a particular exchange or where there is overlap between a Vodafone unbundled exchange and TelstraClear's HFC network. The parties overlap in **[ ]** exchanges in Auckland, **[ ]** exchanges in Christchurch **[ ]**

89. In these areas there is potential for both parties to provide wholesale access to their network infrastructure in competition with each other. Accordingly, Vodafone has proceeded on a conservative basis and considered the effect of the transaction on potential wholesale competition in Exchange Service Areas (**ESAs**) where there would be such aggregation. Hence the relevant geographic markets are wholesale markets for local access in the **[ ]** ESAs where both TelstraClear and Vodafone have unbundled the exchange or there is overlap with TelstraClear's HFC network.

90. Importantly, there is only potential rather than actual aggregation of wholesale access in these areas. While Vodafone provides wholesale access to its network infrastructure assets,

[19] Decision 447: Telstra Corporation Limited/Clear Communications Limited.

[20] The list of exchanges unbundled by each party is set out at **Annexure F**.

TelstraClear currently does not. While ownership of network infrastructure can also affect downstream retail competition, this is dealt with in respect of those relevant product markets.

91. Accordingly, the parties consider the markets for wholesale access to local network infrastructure in those **[ ]** areas where there is aggregation between the parties' network infrastructure.

92. In respect of the business segment, there are a number of open access fibre networks in Auckland, Wellington and Christchurch:

Table 4: Fibre networks

Region / City	Provider
Auckland	• Vector Fibre in Auckland CBD and parts of Auckland, North Shore, West Auckland and Manukau City • CityLink in Auckland CBD • Chorus in CBD • TelstraClear Wholesale
Wellington	• Vector Fibre in CBD • CityLink in CBD • Chorus in CBD • TelstraClear Wholesale
Christchurch	• Enable in CBD • Chorus in CBD • TelstraClear Wholesale

93. These networks are primarily used in the provision of wholesale data services. TelstraClear offers wholesale business local access and business data services to RSPs and systems integrators from its copper and fibre business access networks located in most major metropolitan areas, including Auckland, Christchurch, Hamilton, Hawkes Bay, Masterton, New Plymouth, Palmerston North, Rotorua, Southland, Tauranga, Wanganui and Wellington. These networks connect over 6,000 buildings.

Retail fixed voice, fixed broadband and toll/FTM services

94. Vodafone views local access and calling, fixed broadband and toll/Fixed-to-mobile (**FTM**) as falling into a single market. For example, Vodafone does not currently offer a separate toll/FTM product from its voice offering (although Vodafone does offer a naked broadband service).

95. However, since the precise scope of the product market makes little difference to the underlying competitive impact of the acquisition, Vodafone has adopted the Commission's previous approach and examined separate markets. Accordingly, Vodafone proceeds on the basis of separate national markets for:

(a) fixed-line local access and calling services (**retail fixed voice market**);[21]

(b) national, international and fixed-to-mobile toll calling (**toll/FTM market**);[22] and

[21] Final Report for Resale Services, 16 December 2010, Appendix 2, at paragraph 289.

[22] Final Report on whether the mobile termination access services (incorporating mobile-to-mobile voice termination, fixed-to-mobile voice termination and short-message-service termination) should become designated or specified services, 16 June 2010, paragraph 164.

(c) broadband access, provided over copper, cable and fibre (but excluding fixed-wireless, satellite and 3G mobile services) (**broadband market**).[23]

96. The Commission has previously defined a market for business data services, data services being high-speed, dedicated services designed to meet the needs of business customers.[24] There is a range of services that telecommunications service providers and systems integrators can provide to businesses using these data connections, which fall within this segment, including:

(a) **Fixed and IP Voice services:** Voice telephony services typically provided via connection to the PSTN, or provided at lower cost by converting voice signals to data, and transmitting over IP networks where possible (e.g., for intra-company calls carried over existing company networks).

(b) **Fixed Internet Access**: Interconnection of customer networks with the global internet.

(c) **Local Area Network (LAN)**: Connectivity between computers within a single or closely connected area of buildings. Typically provided using customer owned circuits, with network switching equipment either owned by the customer, or owned/managed by a third party provider. The most common LANs are presently Ethernet networks and wireless LAN networks.

(d) **Wide Area Network (WAN)**: Connectivity between two or more LANs, typically provided with circuits and switching equipment controlled by the service provider. Customers often use this service to connect computer networks between multiple office locations.

(e) **Private Branch Exchange (PBX)/Unified Communications (UC)**: Services for connecting and switching communications (e.g., mobile voice calls, messaging) between multiple users within a business and to external parties.

PBX systems allow multiple users within a business to make internal calls without using the PSTN, and also share a lower number of external connections to the PSTN, thereby lowering telephony costs. This functionality may be provided using customer premises equipment (traditional PBX), or using service provider systems ("Centrex services").

Unified Communications services expand PBX functionality to management of other media, e.g., messaging and mobile calls. Typical UC services include single voice mail boxes for mobile and fixed telephony, and PBX-type services for switching internal company communications.

(f) **Data Centres services:** Storage and management of customer data, typically sold with value-add services such as data security and risk management services.

(g) **Contact Centre services**: Services designed to facilitate communications between businesses and their customers. Typical services include systems designed to route large volumes of simultaneous customer calls to appropriate service agents.

(h) **Security services**: Services to protect stored customer data (e.g., from accidental loss), and to protect against threats from data transfer across customer networks (e.g., unauthorised access of data). Typical services include private networking services and firewalls to prevent unauthorised access to company networks.

[23] Final Report for Resale Services, 16 December 2010, Appendix 2, at paragraph 327.

[24] For example, Decision 497: Telecom / TelstraClear Wholesale services determination, 12 May 2003, and Final Report for Resale Services, 16 December 2010, Appendix 2, at paragraph 347.

97. In respect of business customers, different customers will demand different services, depending on the size of the business and its specific requirements. The parties consider below any impact on business customers in relation to data services and take into account the related services set out above.

Mobile markets

98. Vodafone has adopted the Commission's historic approach of regarding mobile and fixed line services as falling within different markets.[25] Vodafone considers this approach is appropriate for this acquisition given users continue to regard fixed line and mobile services largely as complements rather than substitutes. As noted above, Vodafone also considers the impact on business customers who seek to single-source across fixed and mobile. Accordingly, Vodafone proceeds on the basis of the national mobile telephony market.

99. Vodafone also considers a market for wireless spectrum.

Backbone transmission services

100. The Commission has previously defined a national market for the provision of backbone transmission services.[26]

101. As set out above, TelstraClear operates a predominantly fibre backbone transmission network with 9,000 km of cable including undersea links. North Island and South Island fibre rings provide redundancy. Vodafone does not operate as a seller in this market, but does act as a buyer. Accordingly, there is no overlap between the parties and the Application does not consider this market further.

International connectivity

102. The Commission has recently considered the national market for the wholesale provision of international data capacity.[27]

103. New Zealand's international connectivity is provided primarily by the Southern Cross cable.[28] The Southern Cross cable is operated by Bermuda company Southern Cross Cables Limited and half owned by Telecom New Zealand (50%) with Singtel/Optus owning 40% and Verizon Business 10%.

104. TelstraClear operates as a wholesaler of international connectivity services based on the Southern Cross cable alongside 4 other wholesalers. Vodafone does not have access to the cable as a wholesaler and buys its services from Vocus, a wholesale provider with access to the Southern Cross cable.

105. Accordingly, there is no overlap between the parties and the Application does not consider this market further.

No separate "bundling" market

106. Vodafone recognises that a number of telecommunications products (and pay TV) are commonly sold as bundles. However, given that the competitors which sell the bundles are effectively the same as those which sell the individual products (and they can switch between

[25] See, for example, Final Report for Resale Services, 16 December 2010, Appendix 2, at paragraph 283.

[26] NZCC Decision 447: Telstra Corporation Limited or TelstraSaturn Limited and Clear Communications Limited, at paragraph 125.

[27] Commerce Commission High Speed Broadband Services Demand Side study: Issues Paper 1: technical issues, 19 December 2011.

[28] There is a second Trans-Tasman cable which has very limited capacity and is operated by Telecom. It is, therefore, generally discounted from analyses of New Zealand's international connectivity market.

selling bundles or separate products) Vodafone does not see a separate market for "bundles". However, given that bundling is an important feature of competition in the market Vodafone does assess below the impact of the transaction on competition between bundles, in respect of the relevant products. This is set out in section 5F below.

Summary of markets considered

107. For the reasons set out above, the Application proceeds to consider the following markets

Table 5: Relevant Markets

Market	Geographic Region
Wholesale local access markets	In the **[ ]** exchange area overlap regions
Retail fixed voice market	National
Fixed line toll/FTM market	National
Fixed line broadband market	National
Mobile market	National

13. Product differentiation

Mobile

108. Mobile operators differentiate their offering to an extent on the basis of network quality and coverage and the pre-pay and post-pay options that they provide to consumers. Further differentiation is achieved via pricing, customer services and the range of add-on products or bundles available.

Fixed line/broadband/data

109. In relation to traditional voice products, the major differentiator is price, albeit there are some limited "value add" products that can be delivered as part of a local access product (e.g., voice mail, caller control, caller ID etc.), although these are fairly common across the industry.

110. In relation to broadband products, key differentiators are speed, service, datacaps and price. Bundling other services (such as fixed voice and mobile, and increasingly content) also act as a point of differentiation**.**

111. For business customers, service, reputation and the ability to provide complex services can act as additional points of differentiation.

14. Vertical integration

112. Vodafone is already a vertically integrated mobile network operator and retail mobile provider. Acquisition of TelstraClear's MVNO business will not materially alter the degree of vertical integration.

113. TelstraClear is already a vertically integrated fixed line operator through its ownership of a data network, a local access cable network and national backbone fibre transmission. Vodafone's vertical integration in the fixed market is limited to its position as an unbundler in some exchanges.

114. Accordingly, the acquisition will increase Vodafone's existing vertical integration to the extent it gains new fixed network assets and backbone transmission. However it does not create a *new*

source of vertical integration in fixed line markets that did not otherwise exist (TelstraClear was already vertically integrated).

115. In the mobile market, Vodafone obtains backbone capacity under a contract with Telecom. **[ ]**The acquisition has no relevant competitive impact in this market.

PART 4: COUNTERFACTUAL

15. Relevant counterfactual

Vodafone

116. [

]

Telstra Corporation

117. Absent the acquisition, Telstra Corporation would continue to own the TelstraClear business [ ].

PART 5A: COMPETITION ANALYSIS: WHOLESALE LOCAL ACCESS MARKETS

118. The transaction proposed will not result in a substantial lessening of competition in the wholesale market for local network access. Not only is the degree of overlap between Vodafone and TelstraClear's local network access assets limited, post acquisition, Vodafone will be heavily constrained by Chorus, as the incumbent network owner, existing and new unbundlers and LFCs.

EXISTING COMPETITION

16-18. Existing competitors

Existing and potential providers of wholesale local access

119. Currently, local access is provided to consumers primarily by way of Chorus' copper local loop network, and TelstraClear's HFC network in limited locations. Within Chorus' copper local loop network a number of RSPs have unbundled local exchanges essentially giving them the ability to resell local access over those parts of the network serviced by the unbundled exchanges. Accordingly, this Application considers the competitive effects of aggregation between TelstraClear's HFC network and UCLL access areas and Vodafone's UCLL access areas.

120. There is no overlap in the provision of CBD fibre networks for business customer connections as Vodafone does not own any relevant CBD fibre network assets.

121. The transaction does not result in any actual aggregation in the provision of wholesale access in overlap areas. While Vodafone does offer wholesale access to its UCLL network assets, TelstraClear does not currently offer wholesale services on its HFC or UCLL network assets. Accordingly, from a competition point of view, TelstraClear can be seen only as a potential wholesale competitor to Vodafone in areas where there is overlap in local access network assets. (The effect of ownership of local access network assets on retail competition is dealt with below in sections 5B, 5C and 5D).

122. The overlap between Vodafone's and TelstraClear's local access network assets is limited:

(a) There are **[ ]** exchanges which Vodafone and TelstraClear have both unbundled: Auckland (**[ ]**), Wellington (**[ ]**) and Christchurch (**[ ]**).

(b) There are **[ ]** additional areas of overlap where Vodafone has unbundled an exchange and TelstraClear's HFC network services customers within that ESA.

(c) The overlap (**[ ]** exchanges) accounts for **[ ]** of all unbundled exchanges and **[ ]** of all exchanges in New Zealand.

(d) In any event, in all but two of the **[ ]** exchanges at least one other RSP has unbundled the exchange and potentially more, as described further below.

Chorus

123. Chorus reports it has a market share of approximately 93% of New Zealand's fixed line access market (by connections).[29] The access and wholesale services it provides are regulated. RSPs can gain access by unbundling exchanges or by acquiring a wholesale product (either naked UBA or UBA + POTS).

Hence, the presence of Chorus alone is sufficient to constrain Vodafone, post acquisition.

[29] Chorus, Deustche Bank Corporate Day Presentation, 6 March 2012, p 7. http://media.corporate-ir.net/media_files/IROL/24/248160/DeutscheBankNZCorporateDay.pdf.

Other unbundlers

124. As at November 2011, 149 exchanges serving 90% of urban lines have been unbundled by 8 different providers.[30] As at the time of application, the Applicant understands that 163 exchanges around New Zealand have been unbundled. The following table sets out the list of exchanges where TelstraClear and Vodafone have overlapping local access networks (through unbundling exchanges and also, in respect of Christchurch and Wellington, through TelstraClear's HFC network) and, to the extent known, the other unbundlers present.

[ ]

125. Vodafone and TelstraClear do not have a complete view of which exchanges have been unbundled by which providers. Vodafone does have information on which exchanges have been unbundled by Orcon and CallPlus, although this information may be out of date. Orcon and/or CallPlus have unbundled in all but two exchanges (**[ ]**) where Vodafone and TelstraClear overlap

CallPlus operates as a reseller of Vodafone UCLL services in Auckland, and is also now seeking to unbundle exchanges itself in Auckland. It currently serves customers from Vodafone's equipment in Otahuhu based on an agreement with Vodafone which runs until 31 December 2013.

Conclusion on existing competition

126. Given the limited overlap between the parties (in particular given that TelstraClear does not currently provide wholesale UCLL access to service residential customers) and the constraints provided by Chorus and existing unbundlers, the transaction will not substantially lessen competition in the provision of wholesale local access.

POTENTIAL COMPETITION

19-23. Entry

127. While there will be material existing constraint on Vodafone post acquisition, there is also nothing to prevent a new provider unbundling additional exchanges should they see an opportunity to do so and in particular should Vodafone seek to increase its wholesale price beyond market levels. Any of the existing participants could expand their footprint into new ESAs. For example, it is likely that Telecom will unbundle exchanges once the restriction ends in 2014.

128. The capital cost of installing a DLSAM in an exchange is approximately **[ ]** and the lead time is estimated at no more than 9 months.

129. The lack of barriers to entry is illustrated by the number of exchanges that have been unbundled and the number of participants that have unbundled; in fact in the 12 months to October 2011 alone 71 exchanges were unbundled.[31]

130. In addition, the rollout of UFB will add a new source of competition for wholesale local access. Chorus is the LFC which will roll out UFB in all UFB coverage areas where there is aggregation. Chorus has provided a Deed of Undertaking in favour of the Crown to meet the Crown's open access requirements. Chorus and the Crown have also agreed price caps which apply

[30] Dr Ross Patterson Speech to the International Telecommunications Union (ITU) Asia-Pacific Regulator's Roundtable, Melbourne, Australia, 7 November 2011.

[31] Dr Ross Patterson "In defence of local loop unbundling" (available at http://computerworld.co.nz/news.nsf/telecommunications/opinion-in-defence-of-local-loop-unbundling).

nationally. Chorus may sell their services at prices below or equal to the price caps, not above.[32]

131. The pricing of entry level UFB products is set so as to be comparable with copper-based products available in the market, although the entry level UFB products will be superior.

COUNTERVAILING POWER

24. Constraint from buyers

132. Wholesale customers each exercise countervailing power via the choice they can and do exercise between the competing providers in the market.

25. Major customers

133. **[ ]** TelstraClear does not supply wholesale local access to service residential customers.

COORDINATED MARKET POWER

26 What characteristics of the market will either facilitate or impede co-ordination?

134. There is no evidence of co-ordinated conduct in this market today, and the acquisition does not introduce a new factor that would mean that co-ordination is more likely.

[32] In turn, RSPs may use wholesale products from Chorus and the Local Fibre Companies to create retail UFB-based services which are sold to residents, businesses, schools and health premises.

PART 5B: COMPETITION ANALYSIS: RETAIL FIXED VOICE MARKET

135. The acquisition results in limited overlap between the parties in the fixed voice market. Vodafone will continue to be constrained post-acquisition by Telecom and by other resellers of wholesale POTS products and other unbundlers.

EXISTING COMPETITION

16-18. Existing competitors

Overview of market

136. Vodafone provides retail fixed voice services by way of UCLL where it has unbundled exchanges and otherwise by reselling a wholesale POTS service. TelstraClear also provides retail fixed voice services over UCLL, UBA and on its HFC network in Wellington, Kapiti and Christchurch and its business access network in metropolitan areas. Vodafone provides basic voice services to small business customers, while TelstraClear has a range of fixed voice products to serve business customers of all sizes and requirements.

137. There is a range of other fixed line providers in the market including: Telecom, Orcon, CallPlus and Compass. Systems integrators such as IBM, HP, Unisys and Datacom are becoming increasingly active in this segment by providing VoIP to business customers, while consumer VoIP players such as Skype continue to increase in size.

138. Telecom remains the largest fixed line provider. It operates purely as a retailer of wholesale products which it acquires from Chorus and is prevented from unbundling an exchange until 2014.

139. National market share details (by revenue and connection) are set out below. Post acquisition Vodafone will remain less than half the size of Telecom, with a number of smaller competitors continuing to compete vigorously in the market. The shares below exclude VoIP calls which tend to have no revenue associated with them. In addition, the connection data does not account for the number of users on one connection (e.g., a business customer using PBX may have many internal connections but this is only counted as one connection for these purposes).

Table 7: Retail Fixed Market Share

Competitors (including merger parties)	New Zealand market share by revenue ($m)		New Zealand market share by connections	
Vodafone	[ ]	[ ]	[ ]	[ ]
TelstraClear	[ ]	[ ]	[ ]	[ ]
Merged Entity	[ ]	[ ]	[ ]	[ ]
[ ][ ][ ][ ]Telecom	[ ]	[ ]	[ ]	[ ]
Call Plus	[ ]	[ ]	[ ]	[ ]
Orcon			[ ]	[ ]
Other			[ ]	[ ]
Total	[ ]	[ ]	[ ]	[ ]

Source: Based on Vodafone internal information, TelstraClear information (with Vodafone estimates) and Vodafone's estimates of other parties revenues based on annual reports and companies office filings. Connection figures based on publicly available information. Includes FTM+toll revenues.

140. While the retail fixed voice market is national in scope, due to the different infrastructure owned by the parties, the regional consumer market shares do vary and confirm the complementary nature of the businesses. Vodafone's strength lies in Auckland, while it has modest regional shares in Christchurch and Wellington, TelstraClear's strong areas. In no one region will Vodafone have a market share (by connections) exceeding **[ ]** (this would occur in Wellington where TelstraClear's market share is **[ ]** and Vodafone's is only **[ ]**) and in most regions it is significantly less.

Table 8: Regional Consumer Fixed Voice Share (by connection)

Region	Total market	Vodafone	Vodafone Share	TelstraClear	TelstraClear share
Northland	[ ]	[ ]	[ ]	[ ]	[ ]
Auckland	[ ]	[ ]	[ ]	[ ]	[ ]
Waikato	[ ]	[ ]	[ ]	[ ]	[ ]
Bay of Plenty	[ ]	[ ]	[ ]	[ ]	[ ]
Gisborne	[ ]	[ ]	[ ]	[ ]	[ ]
Hawke's Bay	[ ]	[ ]	[ ]	[ ]	[ ]
Taranaki	[ ]	[ ]	[ ]	[ ]	[ ]
Manawatu-Wanganui	[ ]	[ ]	[ ]	[ ]	[ ]
Wellington	[ ]	[ ]	[ ]	[ ]	[ ]
Tasman	[ ]	[ ]	[ ]	[ ]	[ ]
Nelson	[ ]	[ ]	[ ]	[ ]	[ ]
Marlborough	[ ]	[ ]	[ ]	[ ]	[ ]
West Coast	[ ]	[ ]	[ ]	[ ]	[ ]
Canterbury	[ ]	[ ]	[ ]	[ ]	[ ]
Otago	[ ]	[ ]	[ ]	[ ]	[ ]
Southland	[ ]	[ ]	[ ]	[ ]	[ ]
Total	[ ]	[ ]	[ ]	[ ]	[ ]

Source: IDC total regional connections estimates for 2011, Vodafone and TelstraClear actual figures. Consumer data only (hence difference with total national figures) as business connections not available on regional basis.

Nothing unique lost through aggregation

141. At the retail level, competitive impacts *may* differ depending on the type of upstream aggregation in a particular ESA:

(a) aggregation where both TelstraClear and Vodafone have network access equipment (e.g., unbundled exchange or HFC);

(b) aggregation where TelstraClear owns network access equipment (either HFC or UCLL) and Vodafone buys wholesale access from a third party (or vice versa); and

(c) aggregation where both TelstraClear and Vodafone buy wholesale access to resell at the retail level.

142. In Vodafone's view, the acquisition does not remove a particular source of competitive constraint in any of these scenarios. In all cases:

(a) Telecom will remain the largest national participant, with a strong brand and competitive offering. Its continuing presence in the market, as well as the presence of other providers such as Orcon, CallPlus and others, will competitively constrain Vodafone post acquisition;

(b) there is a range of other providers who have shown a willingness to compete in the retail market by unbundling exchanges, by offering UBA plus POTS based products or products offering VoIP services over a naked UBA based product. An example of this is Orcon's Genius service. There is nothing that would prevent these RSPs from expanding their presence should the opportunity present itself particularly given the new regulated Unbundled Copper Low Frequency Service (**UCLFS**)[33] service available to supplement UBA. Chorus products are available on an equal access basis to all providers; and

(c) UFB rollout will act as a significant constraint on the traditional POTS service.

143. Specifically in relation to the three different types of aggregation, nothing unique will be lost via the acquisition:

(a) aggregation where both TelstraClear and Vodafone have network access equipment;	• in all exchanges resellers of Chorus services (in particular Telecom) remain as competitors; • Vodafone is aware that competing unbundlers operate in all but two overlapping ESAs; • in the two particular ESAs, potential entry will act as a constraint (assuming no competitors have indeed unbundled these exchanges already); • CallPlus has wholesale access to Vodafone's Digital Subscriber Line Access Multiplexer (**DSLAM**)s from which it provides services to customers; • in many exchanges resellers of LFCs' services will become competitors.
(b) aggregation where TelstraClear owns network access	• Vodafone only competes with a UBA + POTS

[33] The Unbundled Copper Low Frequency Service (UCLFS) is defined as a service (and its associated functions, including the associated functions of operational support systems) that enables access to, and interconnection with, the low frequency (being the frequency band between 300 and 3400 Hz) in Chorus's copper local loop network (including any relevant line in Chorus's local telephone exchange or distribution cabinet) that connects the end-user's building (or, where relevant, the building's distribution frame) to the handover point in Chorus's local telephone exchange. See http://www.comcom.govt.nz/chorus-unbundled-copper-low-frequency-service-std/.

	infrastructure (either HFC or UCLL) and Vodafone buys wholesale access from a third party (or vice versa); and	offer in these regions; • all other RSPs can and do replicate these services in this market via UCLL or wholesale (in particular Telecom).
(c)	aggregation where both TelstraClear and Vodafone buy wholesale POTS and resell at the retail level.	• in some of the affected ESAs, other RSPs have, or are likely to have, unbundled; • in any event, all other RSPs can and do replicate these services in this market (in particular Telecom).

Business segment

144. In the business segment, customers differ as to how they purchase fixed services. Smaller businesses' requirements are little different to requirements of residential customers and the products provided are effectively the same. Larger businesses tend to require more complex solutions including WAN to connect business premises and PBX services to direct voice traffic.

145. TelstraClear has strong capability in providing fixed voice solutions to business customers, including large businesses and those with complex requirements. On the other hand, Vodafone has limited ability in providing more advanced or large scale solutions to business customers. Vodafone's fixed voice products are currently limited to provision of two VoIP lines.[34] Vodafone offers large business fixed solutions only by way of partnering with other providers. For example, Vodafone provides WAN solutions through a partnership with Kordia and PBX through a partnership with Avaya.

146. Accordingly there is limited overlap between the parties in the provision of fixed voice services. The overlap occurs in respect of smaller business customers, where competitive conditions are effectively the same as for residential customers (with all of the same providers operating).

147. In respect of larger customers with more complex needs, nothing unique is lost as Vodafone's partners (including Kordia and Avaya) will all remain as independent competitors in the market.

148. As set out above, a small portion of business customers choose to single-source a number of their telecommunications (and in some instances data management) products. Customers might single-source to ensure a single point of accountability for service supply or to drive efficiencies in purchasing. The acquisition will not reduce competition in respect of these customers. Indeed, the acquisition will make Vodafone a more effective competitor to Telecom/Gen-i for these customers by providing an alternative single-source provider of fixed and mobile services. (Competition for sale of bundles to consumers/small business is dealt with further in section 5F).

149. Accordingly, Vodafone considers that there is ample existing competition to constrain Vodafone post acquisition. The acquisition does not create market power, and nor does it remove a particular type of constraint from any relevant market.

[34] **[ ]**.

POTENTIAL COMPETITION

19-23. Entry and constraint

150. Barriers to provide a purely voice local access service have been reduced by the introduction of the UCLF service, which enables RSPs to access the low frequency part of the local loop to provide a POTS service which can be combined with a UBA service.

151. Alternatively, RSPs can fully unbundle which provides RSPs the ability to offer their own clothed UBA product.

152. VoIP is also a real constraint to providers of POTS services to consumers and businesses. Niche providers such as 2Talk, Conversant, VFX (WorldxChange) and Kiwilink offer VoIP services to residential consumers as an alternative to POTS, while over the top providers such as Skype (Microsoft), Google and Viber also provide VoIP replacements for voice calls. Systems integrators such as HP, IBM, Datacom, and Dimension Data amongst others are increasingly able to provide fixed line access to business customers over existing open-access fibre networks. They also can provide VoIP over data networks, e.g., on a business's WAN. This increasingly acts as a constraint on traditional voice products for business customers.

153. In the Commission's Annual Telecommunications Monitoring Report 2011 it recognises that "The significant fall in the chargeable local call price is likely to have been due to competition from new VoIP services that are being pushed in the business sector and, more recently, in the residential sector."

COUNTERVAILING POWER

24-25. Constraint from buyers

154. Customers exercise countervailing power via the choice they can and do exercise between the various providers in the market.

155. A recent NZCC market report found that 10% of customers had switched fixed line telecommunications provider, with the biggest driver being a desire to improve broadband service.[35]

[35] http://www.comcom.govt.nz/consumer-switching-survey/.

PART 5C: COMPETITION ANALYSIS: FIXED LINE TOLL/FTM MARKET

156. The acquisition results in limited overlap between the parties in the fixed line toll/FTM market. Vodafone will continue to be constrained post acquisition by resellers of other wholesale and UCLL-based voice providers in addition to calling cards and VoIP technology.

EXISTING COMPETITION

16-18. Existing competitors

157. Vodafone and TelstraClear both provide fixed line toll/FTM services as part of their fixed voice offering and therefore the competitive analysis is similar to provision of retail fixed voice services. However, there are even more options for customers in making national, international and FTM calls including calling cards (based on free local calling) and VoIP (such as Skype which is now owned by Microsoft). There are many toll/FTM call providers in the market, including Telecom and a strong competitive fringe.

158. In its Annual Telecommunications Monitoring Report 2011, the Commission noted that "Average calling prices have continued to fall... with the largest declines coming in fixed to mobile calling and chargeable local calls" and "Skype to Skype traffic (including video Skype) grew to 48% to equal one third of traditional international calling minutes." This is indicative of increasing competitive pressure in this market.

159. These overall competition options and trends and the presence of numerous existing competitors will continue to constrain Vodafone post-acquisition.

Table 9: Fixed Line Toll/FTM Market Share (Revenue)

Competitors (including merger parties)	New Zealand market share ($m)	
Vodafone	[ ]	[ ]
TelstraClear	[ ]	[ ]
Merged Entity	[ ]	[ ]
Telecom (incl Gen-i)	[ ]	[ ]
Other	[ ]	[ ]
Total	[ ]	[ ]

Source: Estimates from Commerce Commission market report, Vodafone and TelstraClear internal information, TCNZ from Annual Report. Includes 0800 revenues.

160. With respect to making international calls, residential consumers have the option of VoIP services offered by niche providers such as 2Talk and also the alternative service offered by Skype. Skype is now owned by Microsoft which means that soon all subscribers to Microsoft Operating Systems may automatically have the Skype product as part of their package. As consumers shift to new technologies (including UFB), the low costs associated with Skype and VoIP mean that they will become heavier constraints on traditional toll calling in the future. In the business segment, VoIP is also acting as an increasing competitive threat as telecommunications providers and systems integrators increasingly convert voice traffic into VoIP and carry it over IP networks where possible.

POTENTIAL COMPETITION

19-23. Constraint from entry

161. Barriers to entry into this market are very low as evidenced by the large number of participants. While existing competition is sufficient to constrain Vodafone post-acquisition, there is nothing which would prevent an existing participant or a new entrant entering and expanding in this market.

COUNTERVAILING POWER

24-25. Constraint from buyers

162. Customers exercise countervailing power via the choice they can and do exercise between the various providers in the market.

PART 5D: FIXED LINE BROADBAND MARKET

163. The acquisition results in limited overlap between the parties in the fixed broadband market. There are many players in this market, including aggressive and fast-growing competitors such as Orcon and Slingshot which have already demonstrated a strong competitive presence in this market by unbundling and reselling wholesale UBA products. Further Telecom, as the major incumbent, will continue to pose a real constraint on Vodafone, post acquisition.

EXISTING COMPETITION

16-18. Existing competitors

164. The competitive analysis in the fixed line broadband market is similar to that in the retail fixed voice market. There are many fixed line broadband providers in the market, with Telecom the largest provider and others including Orcon, CallPlus and Compass.

165. Vodafone provides retail fixed internet access by way of UCLL where it has unbundled exchanges and otherwise by purchasing wholesale access (either from Chorus for residential customers or from an open access CBD fibre network provider in respect of business customers). TelstraClear also provides retail fixed internet access using UCLL and UBA, on its HFC network where available and through its own or other's CBD fibre networks.

166. The Applicant estimates the market shares as follows.

Table 10: Fixed Line Broadband Market Share

Competitors (including merger parties)	New Zealand market share by revenue ($m)		New Zealand market share by connections	
Vodafone	[ ]	[ ]	[ ]	[ ]
TelstraClear	[ ]	[ ]	[ ]	[ ]
Merged Entity	[ ]	[ ]	[ ]	[ ]
Telecom	[ ]	[ ]	[ ]	[ ]
CallPlus	[ ]	[ ]	[ ]	[ ]
Orcon			[ ]	[ ]
Other			[ ]	[ ]
Total	[ ]	[ ]	[ ]	[ ]

Source: Based on Vodafone internal information, TelstraClear information (with Vodafone estimates) and Vodafone's estimates of other parties' revenues based on annual reports and companies office filings. Connection figures based on publicly available information. Excludes fixed data services to business customers

167. While this is a national market, the regional (consumer) breakdown confirms the complementary nature of the businesses. Vodafone's strength lies in Auckland, while it has modest regional shares in Canterbury and Wellington regions, TelstraClear's stronger areas. On a regional basis Vodafone does not have access to competitors' market shares. Post acquisition, in no one region will Vodafone have a market share exceeding **[ ]**% (this would occur in Wellington where TelstraClear's current market share is **[ ]**% and Vodafone's current share is only **[ ]**) and in most regions it is significantly less.

Table 11: Regional Consumer Fixed Line Broadband Market Share

Region	Total market	Vodafone connections	Vodafone share	TelstraClear connections	TelstraClear share
Northland	[ ]	[ ]	[ ]	[ ]	[ ]
Auckland	[ ]	[ ]	[ ]	[ ]	[ ]
Waikato	[ ]	[ ]	[ ]	[ ]	[ ]
Bay of Plenty	[ ]	[ ]	[ ]	[ ]	[ ]
Gisborne	[ ]	[ ]	[ ]	[ ]	[ ]
Hawke's Bay	[ ]	[ ]	[ ]	[ ]	[ ]
Taranaki	[ ]	[ ]	[ ]	[ ]	[ ]
Manawatu-Wanganui	[ ]	[ ]	[ ]	[ ]	[ ]
Wellington	[ ]	[ ]	[ ]	[ ]	[ ]
Tasman	[ ]	[ ]	[ ]	[ ]	[ ]
Nelson	[ ]	[ ]	[ ]	[ ]	[ ]
Marlborough	[ ]	[ ]	[ ]	[ ]	[ ]
West Coast	[ ]	[ ]	[ ]	[ ]	[ ]
Canterbury	[ ]	[ ]	[ ]	[ ]	[ ]
Otago	[ ]	[ ]	[ ]	[ ]	[ ]
Southland	[ ]	[ ]	[ ]	[ ]	[ ]
Total	[ ]	[ ]	[ ]	[ ]	[ ]

Source: IDC total regional connections estimates for 2011, Vodafone and TelstraClear actual figures. Consumer data only (hence difference with total national figures) as business connections not available on regional basis.

168. Currently the major broadband technology for residential customers is using the copper local loop to provide DSL services, with TelstraClear's HFC network in parts of Wellington and Christchurch providing an alternative. These will progressively be supplemented by fibre as UFB is rolled out.

169. With respect to business customers, open access fibre networks are available for servicing businesses in CBDs in addition to copper-based services.

170. As with fixed line voice, the acquisition does not remove a unique form of competitive constraint. In respect of residential customers:

(a) Telecom will remain the largest national participant, with a strong brand and competitive offering. Its continuing presence in the market, as well as the

presence of other providers such as Orcon, CallPlus and others, will competitively constrain Vodafone, post acquisition;

(b) there is a range of other providers who have shown a willingness to compete in this market by unbundling exchanges and by acquiring clothed or naked UBA. There is nothing that would prevent these RSPs from expanding their presence should the opportunity present itself; and

(c) the UFB rollout will provide a constraint and will put increasing pressure on the traditional copper-based providers.

171. Specifically in relation to the three different types of aggregation, nothing unique will be lost via the acquisition:

(a) aggregation where both TelstraClear and Vodafone have network access equipment;	• in all exchanges resellers of Chorus services (in particular Telecom) remain as competitors; • Vodafone is aware that competing unbundlers operate in all but two overlap ESAs; • in the two particular ESAs, potential entry will act as a constraint (assuming no competitors have indeed unbundled these exchanges already); • In many exchanges resellers of LFCs' services will become competitors.
(b) aggregation where TelstraClear owns network access infrastructure (either HFC or UCLL) and Vodafone buys wholesale access from a third party (or vice versa); and	• Vodafone only competes with a UBA + POTS offer in these regions; • all other RSPs can and do replicate these services in this market (in particular Telecom).
(c) aggregation where both TelstraClear and Vodafone buy wholesale UBA and resell at the retail level.	• in some of the affected ESAs, other RSPs are, or are likely to have, unbundled; • in any event, all other RSPs can and do replicate these services in this market (in particular Telecom).

172. In respect of business customers there is no overlap in networks as Vodafone does not own any CBD fibre networks. A range of providers will continue to provide data services to business customers over open access fibre networks, including existing telecommunications providers and systems integrators such as IBM, Datacom, HP, Unisys and Dimension Data. Vodafone estimates that it has less than **[ ]** of the fixed data segment, with TelstraClear at **[ ]** and Telecom at **[ ]**. As with residential customers, nothing unique is lost in respect of provision of fixed broadband services to business customers.

173. Finally, as set out above, to the extent that business customers choose to single-source fixed and mobile communications, the acquisition will make Vodafone a strong competitive option to Telecom/Gen-i. (Competition for sale of bundles to consumers/small business is dealt with further in section 5F).

174. For these reasons, Vodafone considers that there is ample existing competition to constrain it post-acquisition. The acquisition does not create market power, and nor does it remove a particular type of constraint from any relevant market.

POTENTIAL COMPETITION

19-20. Constraint from entry

175. While existing competition will constrain Vodafone post-acquisition, potential competition is also likely to constrain Vodafone. Barriers to entry into this market are very low. RSPs can access UBA and a regulated UFB product in regions as it is rolled out. Entry can occur quickly.

176. With equal access to fibre assets, success for an RSP will be driven by the strength of their customer proposition (whether based on price, customer service, product bundles or data caps) and their ability to distribute their products successfully.

177. In respect of business customers, the existence of a number of open-access CBD fibre networks results in very low barriers to new entrants providing business broadband connections.

COUNTERVAILING POWER

24-25. Constraint from buyers

178. Customers exercise countervailing power via the choice they can and do exercise between providers in the market.

PART 5E: MOBILE MARKET

179. TelstraClear has no mobile network and provides a limited mobile offering based on an MVNO arrangement with Vodafone. Accordingly, the level of aggregation in the market is de minimis and does not result in a substantial lessening of competition. The increment of spectrum allocation to Vodafone will not reduce the access of existing or potential competitors to wireless spectrum.

EXISTING COMPETITION

16-18. Existing competitors

Mobile

180. Vodafone, Telecom and 2degrees are the major competitors in the mobile market. Market shares are set out in the table below:

Table 12: Mobile market shares

Competitors (including merger parties)	New Zealand market share by revenue ($m)		New Zealand market share by connections	
Vodafone	[ ]	[ ]	[ ]	[ ]
TelstraClear	[ ]	[ ]	[ ]	[ ]
Merged Entity	[ ]	[ ]	[ ]	[ ]
Telecom	[ ]	[ ]	[ ]	[ ]
2degrees	[ ]	[ ]	[ ]	[ ]
Other	[ ]	[ ]	[ ]	[ ]
Total	[ ]	[ ]	[ ]	[ ]

Source: Based on IDC data and internal Vodafone and TelstraClear data in addition to public data on connections.

181. TelstraClear's position in the market is very limited; it operates only as an MVNO utilising Vodafone's services. Telecom and 2degrees will continue to provide strong competition to Vodafone post-acquisition and several other MVNO operators (Orcon, CallPlus, Compass, Snap and Digital Island) will also remain in the market.

182. Specifically in relation to the provision of mobile services to business customers there is again little overlap given TelstraClear's limited offering. Telecom's position in this segment is even stronger than its position in the market overall and 2degrees is also pushing into this segment of the market, with a very strong "all you can eat" voice and data offering. Indeed, Vodafone regularly sees months in which more business customers switch from it to 2degrees than switch from it to Telecom.[36]

183. Accordingly, the level of aggregation in the market is de minimis and does not result in a substantial lessening of competition.

Bundles of products to consumer and small businesses

[36] Source: Vodafone number porting statistics.

184. Vodafone has set out above why the transaction will not result in a substantial lessening of competition in any relevant product market. While it does not view a separate market for the provision of bundles of products, for completeness it sets out below why the acquisition will not affect competition in the provision of these products (and other products) as bundles.

185. Telecommunications providers regularly offer consumers bundles of products, which can include all or any of:

(a) Fixed voice;

(b) toll/FTM;

(c) broadband;

(d) pay TV; and

(e) mobile.

186. In Vodafone's view, the main reason why providers offer bundles is to provide packages to attract customers, in response to customer demand, and potentially increase customer loyalty. For this reason most providers currently bundle to some extent. This is pro-competitive and results in lower prices for customers who wish to receive a bundle of services from one provider. However, it is not the case that customers will always choose to take up a bundle if offered to them; indeed many customers have a preference for acquiring telecommunications products separately rather than in a bundle.

187. This will not change post-transaction. Because the acquisition will not lessen competition in relation to any component of a telecommunications bundle, the acquisition will not substantially lessen competition between providers of bundles. For example, Vodafone currently offers various bundles with mobile phones: including all of the products above or some combination (e.g., naked broadband with or without a resold Sky box). TelstraClear provides only one bundle including mobile (its Biz Complete Plan includes mobile, fixed line and broadband).

188. Many market participants currently provide bundles and will continue to do so post-acquisition. Telecom, Orcon, M2 and CallPlus currently provide bundles and will all continue to compete with bundles including mobile (or without mobile if that is beneficial). In addition there is no reason why an ISP could not resell a 2degrees product within a bundle (in the same way as Vodafone resells Sky TV's products within a bundle). Accordingly, nothing unique is lost as a result of the transaction.

189. In respect of Pay TV, currently so far as the Applicant understands, Vodafone, Telecom and Slingshot have Sky reseller agreements while Telecom, TelstraClear and Slingshot have Sky retransmission agreements.[37] Orcon has publicly announced that it has chosen not to enter a reseller agreement preferring to focus on other options. The only overlap between Vodafone and TelstraClear in this respect occurs in Christchurch and Wellington where Vodafone's ability to resell Sky services overlaps to an extent with TelstraClear's ability to retransmit Sky (TelstraClear does not sell Sky in any way outside of its HFC network). The number of competitors which can resell Sky services and the ability of others to obtain Sky reseller agreements means that there is no substantial lessening of competition in relation to offering bundles of products including Pay TV.

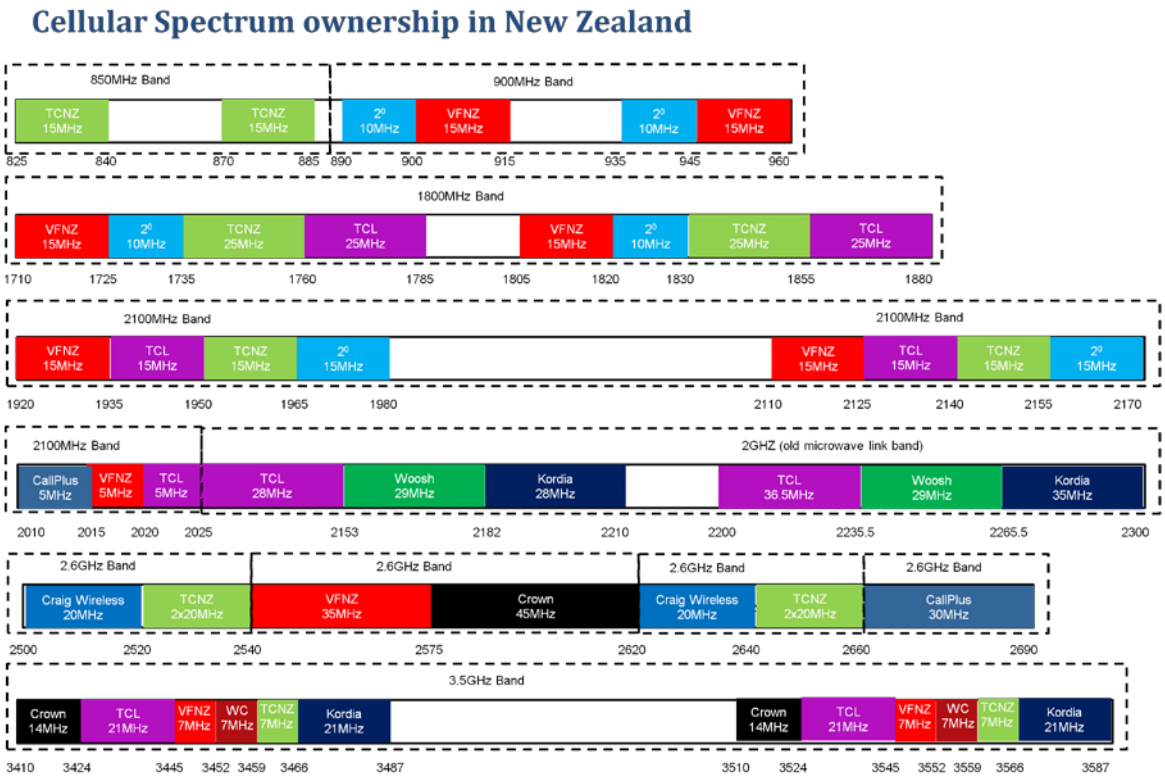
190. Accordingly, the acquisition will not result in a substantial lessening of competition in the supply of bundles of products.

[37] A reseller agreement simply allows the resale of the Sky product including the Sky box through which the customer receives satellite services. A retransmission agreement allows the retransmitter to retransmit through its own network e.g., HFC (or online). There may be additional holders of reseller or retransmission agreements but these are not public.

Spectrum

191. The following diagram shows the wireless spectrum rights held by the various mobile services providers in the New Zealand market.

Figure 2: Spectrum ownership in New Zealand



192. As discussed above, Vodafone will acquire some of TelstraClear's spectrum as part of the transaction. The details of this transaction are described above. However, ultimately, Vodafone will acquire 2 x 10 MHZ of 1800MHz, and 2 x 10MHz of 2100MHz radio spectrum, which can be used for mobile purposes.

193. As set out above, the additional spectrum acquired in the 1800MHz and 2100MHz bands will facilitate **[ ]**and will enhance the 3G network in addition to decreasing ongoing capex through decreasing the need for cell towers.

194. From a consumer perspective, the wireless spectrum will be put to immediate use and enhance service to customers.

195. Vodafone's acquisition of this spectrum will not deter entry or expansion. The spectrum is currently unused by TelstraClear, and this has not prevented the emergence of new network products or a new network provider in 2degrees. Vodafone does not understand that either Telecom or 2degrees has a pressing need for wireless spectrum. In any event, some spectrum (sufficient for a new entrant into the market) will remain with Telstra Corporation (and the Applicant understands will be made available for acquisition). In the 1800MHz band, the spectrum that will be available is Vodafone's existing 15MHz allocation which is contiguous with 2degrees' existing allocation, potentially allowing 2degrees to obtain 25MHz of contiguous spectrum in the 1800MHz band, equivalent to Vodafone and Telecom. In addition, the forthcoming 700MHz spectrum band auction will provide further options for new entry.

196. As regards non-mobile spectrum, Vodafone will acquire 1 x 5MHz of 2100MHz TDD spectrum, 2x21MHz of 2Ghz band spectrum and 2 x 28 MHz of 3.5 GHz spectrum and 8 licences for 25GHz+ spectrum. Neither TelstraClear nor Vodafone currently use their non-mobile spectrum,

or have plans to do so. Other operators have deployed fixed-wireless services in these bands, including Kordia, Woosh, Compass and CallPlus, using either national or regional licenses. Vodafone does not understand that any pressing need for non-mobile spectrum exists, with the majority of licenses remaining unused or only partially used, and regional licenses still available from the MED.

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PART 5F: COORDINATED MARKET POWER

26. What characteristics of the market will either facilitate or impede co-ordination?

197. None of the relevant markets highlighted above show signs of coordinated conduct today and, more importantly, the acquisition does not remove any unique factor which is preventing co-ordination today or lead to the emergence of a new factor which will provide an incentive for co-ordination in the future.

198. In all markets there is a range of competitors, of different size with differing business models and approaches. Market positions are by no means symmetric or even approaching symmetric; in most cases there is a large incumbent and then a number of smaller aggressive price competitors who can enter and expand quickly. Indeed, barriers to entry and expansion in all of the consumer markets are relatively low.

199. In the business segment specifically, providers compete at discrete intervals for a particular customer's business. Vodafone's experience is that customers can and do exercise countervailing power, and given the high fixed cost/low variable cost nature of operating the assets, the countervailing threat is particularly acute.

PART 6: EFFICIENCIES

27. Efficiencies from the merger

200. The acquisition creates a number of cost synergies, which Vodafone estimates to be approximately [ ] per year.

201. There are the natural and normal synergies from removing duplicated management and back office functions and benefits of increased scale reducing operating costs, but the synergies go beyond this. For example:

(a) Vodafone will be able to [ ] by utilising TelstraClear's backhaul and transmission services – Vodafone estimates the savings to be approximately [ ];

(b) It overlays TelstraClear's network and UCLL footprint thereby improving margin as Vodafone will be able to move from acquiring wholesale access to UCLL access or TelstraClear's cable network – Vodafone estimates the savings to be approximately [ ] per year;

(c) The ability to [ ] in wireless spectrum [ ];

(d) Reducing network management and internal IT expenses;

(e) Reducing payroll costs, primarily from the duplication of management; and

(f) Reducing other operating costs.

202. Given the competition that will remain in the market and the variable cost nature of many of these synergies, end-users will benefit directly from these cost synergies.

PART 7: OTHER FACTORS

28. Other factors

203. Not applicable.

PART 8: FURTHER INFORMATION AND SUPPORTING DOCUMENTATION

29. Potentially interested parties

204. Contact details for relevant competitors, buyers and suppliers in the affected markets, and Vodafone's top five customers are attached as **Annexure G**.

30. Annual reports

205. Annual Reports for each of Vodafone, Telstra Corporation and TelstraClear for the most recent financial year are attached as **Annexures H, I and J.**

PART 9: CONFIDENTIALITY

31. Confidentiality

206. Confidentiality is sought in respect of the information in this Application that is contained in bolded square brackets, i.e., **[ ]**.

207. 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 contains valuable information which is confidential to Vodafone and/or Telstra Corporation; and

(b) disclosure would be likely unreasonably to prejudice the commercial position of the Vodafone and/or Telstra Corporation, as the party providing the information.

208. Vodafone requests that it is notified of any request made to the Commission under the Official Information Act 1982 for Vodafone confidential information, and that the Commission seeks its views as to whether the information remains confidential and commercially sensitive at the time those requests are being considered. Telstra Corporation requests likewise in respect of Telstra Corporation confidential information.

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

Annexure A: Declaration

THIS NOTICE is given by **Vodafone New Zealand Limited**.

Vodafone New Zealand Limited hereby confirms that:

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

Vodafone New Zealand Limited undertakes to advise the Commission immediately of any material change in circumstances relating to the application/notice.

The confirmations and undertakings in this Declaration do not apply to information supplied to Vodafone's advisors by Telstra Corporation and kept confidential from Vodafone.

Dated this 12th day of July 2012.

* {Signed by **Vodafone New Zealand Limited**

Russell Stanners

Chief Executive Officer}

*{I am a director/officer of the company and am duly authorised to make this application/notice.}

or

*{The common seal of (name of applicant company/organisation) was affixed hereto in the presence of:

_____

Director/Authorised signatory}

Annexure B: Glossary

Abbreviation/ acronym	Definition	Description
2G	Second Generation	Cellular telephone systems designed primarily to carry voice converted into digital signals. (First generation systems carried voice as analogue signals). Examples of standard 2G systems include GSM, D-AMPS, CDMA. 2G systems may be upgraded to carry data, for example, using the General Packet Radio Services (GPRS) standard. Such upgraded systems are commonly referred to as 2.5G. Within New Zealand, three companies operate 2G systems. Vodafone and 2degrees operate GSM networks, while Telecom operates a CDMA network.
3G	Third Generation	Cellular telephony systems are designed to carry both voice and data, with voice signals converted into data. Data speeds exceed 2.5G systems, and are typically ~2Mbps. Examples of standard 3G systems are Universal Mobile Telecommunications System (UMTS) and CDMA2000. In New Zealand, two companies operate 3G systems, with both Vodafone and Telecom having deployed UMTS.
4G	Fourth Generation	Cellular telephony and data systems designed to carry high speed data, including voice signals converted to data. 4G systems are designed to offer higher data transfer speeds than 3G, typically in the order of 6-12Mbps in real network conditions. Examples of 4G systems include Long Term Evolution (LTE) and WiMax. In New Zealand, both Vodafone and Telecom expect to deploy LTE systems.
Access seekers		Access seekers are entities who purchase wholesale products to create retail services.
Backhaul		Backhaul refers to transmission capacity in a network between aggregation points. In the New Zealand market this often refers to one of two scenarios: i. transmission between a Chorus owned local exchange and a further aggregation point (e.g. a central office); or ii. transmission capacity between a mobile network operator's base station and its core network.
Backbone		Backbone networks refer to high-capacity networks that connect major aggregation points in a telephone network (typically "metropolitan nodes" or "class 1 offices"). Within New Zealand, this typically refers to fibre optic cable networks that connect Auckland, Wellington and Christchurch.
Cabinet		Roadside cabinets which contain fixed line telecommunications equipment to serve a small number of premises. Typically digital subscriber line (DSL) modems and access multiplexers (DSLAMs) Traditionally this equipment was located at a local exchange, which services a larger number of users. Moving DSL equipment from the exchange to the cabinet shortens the circuit length between the equipment and the customer premise, enabling faster data transmission.

Abbreviation/ acronym	Definition	Description
CDMA		Code-Division Multiple Access. This refers to both a system for 2G cellular transmission, and a wireless transmission methodology used in both 2G and 3G systems. The transmission methodology allows multiple signals (users) to simultaneously transmit over a single channel, with highly efficient use of bandwidth.
Centrex Solutions		Centrex is a set of specialized business solutions (primarily, but not exclusively, for voice service) where the equipment providing the call control and service logic functions is owned and operated by the service provider and hence is located on the service provider's premises.
Clothed UBA	Clothed Unbundled Bit-stream Access	The bundle including the regulated wholesale bit-stream service and a Plain Old Telephone System telephony service, currently provided by Telecom.
Cloud	Cloud computing services	Cloud computing is the delivery of computing services over remote networks, rather than as products typically installed at customer premises. Typical computing services include software (e.g., e-mail, customer relationship management software), platforms (e.g., databases, test environments), infrastructure (e.g., data storage, data processing).
Co-location		A wholesale service providing access seekers with co-location space in a Telecom exchange or cabinet for the purpose of installing their own equipment.
DSL / ADSL / VDSL	Digital Subscriber Line / Asymmetric Digital Subscriber Line / Very High Speed Digital Subscriber Line	Technology enabling high speed data transfer over copper access lines that were traditionally used for analogue voice signals only. Customers install a DSL modem at their premise, while DSL service providers install DSLAMs at a local exchange or cabinet. ADSL systems have different download and upload speeds, with maximum 24Mbit/s download and 3.3Mbit/s upload (ADSL2+). VDSL systems are capable of 55Mbit/s download speeds, with 3Mbit/s upload, but require shorter circuit lengths than ADSL technology.
DSLAM	Digital Subscriber Line Access Multiplexer	Service provider equipment located in either an exchange or a cabinet that enables the provision of DSL services over copper wires. DSLAMs aggregate data signals from multiple subscribers for transmission, via backhaul, to service providers' core networks.
ESA	Exchange Service Area	A geographic area within which all fixed line telephony services are connected to the same local exchange. Typically, an ESA is an area with a radius of no more than 30km, and no more than 25,000 phone lines.
Exchange / Local Exchange		An exchange is an aggregation point in a network where circuits connected to customer premises terminate. Exchanges house switching equipment, which enables data and voice signals to be directed to and from the appropriate customer premises.
FTM	Fixed-to-mobile	Calls made over fixed line access systems to mobile phones.

Abbreviation/ acronym	Definition	Description
FTTN	Fibre-to-the-node	FTTN is fibre which is terminated in a street cabinet up to several kilometres away from the customer premises, with the final connection being copper. The term refers to a network upgrade that replaces the copper feeder (between the exchange and cross connect cabinet) with optical fibre and upgrades the cabinet to enable the installation of DSLAM equipment.
FTTP / FTTH	Fibre-to-the-premises / Fibre-to-the-home	Fibre-to-the-premises is network infrastructure with fibre optic cabling access lines. That is, fibre optic circuits connecting local exchanges and customer premises. This enables high speed data transmission. In New Zealand, FTTP infrastructure is currently being built to 75% of premises as part of the Ultra-Fast Broadband (UFB) initiative.
Telecom/Gen-i		A business unit of Telecom, that provides Information Technology (IT) services, data management services, fixed network services and mobile network services to medium and large enterprises in Australia and New Zealand.
GSM	Global System for Mobile Communications	A set of standards to describe technologies for second generation digital cellular networks. In New Zealand, Vodafone and 2degrees operate GSM networks.
HFC network	Hybrid Fibre-Coaxial	A network which combines transmission over fibre optic cables and coaxial copper cables. Coaxial cables are typically used for customer premises ('access') connections, while fibre optic cables are typically used to carry aggregated data to and from customers. HFC networks were typically deployed to carry both transmit television and provide internet data services. In New Zealand, TelstraClear currently operate an HFC network in Wellington, Christchurch and the Kapiti area.
HSPA	High Speed Packet Access	HSPA is a technology standard that improves the data transmission performance of existing 3G UMTS mobile telephony systems. HSPA supports downlink data speeds of 14Mbit/s and uplink speeds of 5.8Mbit/s.
IP	Internet Protocol	A standard enabling transmission of discrete 'packets' of data between devices that may be on different networks. IP provides standard addressing and routing methods to enable data packets to reach its intended recipient.
IPTV	Internet Protocol Television	A system/service for transmitting television using the Internet Protocol. IPTV enables television services to be delivered over the same connections as other data and voice services, rather than dedicated radio channels or cable TV networks. IPTV enables enhancements over traditional TV delivery, such as time-shifting and video-on-demand services.
ISDN	Integrated Services Digital Network	Standard that enables transmission of data, voice, and video over traditional copper telephone circuits or coaxial cables. Common services delivered using ISDN are "basic rate interface" which delivers 128kbps, while "primary rate interface" delivers up to 2.0 Mbit/s. Typically, ISDN services are used to connect businesses' PBX equipment.
ISP	Internet Service Provider	Retailer of broadband access services. Usually refers to fixed line broadband service providers that also offer voice access.

Abbreviation/ acronym	Definition	Description
LAN	Local Area Network	A LAN provides connectivity between computers within a single or closely connected area of buildings. Typically provided using customer owned circuits, with network switching equipment either owned by the customer, or owned/managed by a third party provider. The most common LANs are presently Ethernet networks, and wireless LAN networks.
Layer 1		Typically refers to the physical infrastructure in a data transmission network, such as physical fibre and copper lines, or radio frequency transceivers. Layer 1 services may be provided to access seekers, who then commission equipment to transmit data over the infrastructure. For example, “dark fibre” refers to the fibre optic circuits provided without any transmission equipment. Chorus’ unbundled copper local loop (UCLL) services are an example of a Layer 1 service. Retail service providers (RSPs) need to install their own DSLAMs to transmit data and provider end-user services. Layer 1 may also be referred to as the Physical Layer.
Layer 2		Refers to active infrastructure required to transmit and receive error-free data over circuits in a network. For example, Ethernet is an example of a Layer 2 standard for transmitting data across fibre or copper networks. Layer 2 services are typically provided by wholesalers, such as Chorus. Retail service providers may then use these as inputs to provide end-user services. For example, Chorus’s UBA service is a Layer 2 service used by Retail Service Providers to provide consumer broadband access. Layer 2 may also be referred to as the Data Link Layer
Layer 3		Refers to protocols required to deliver data over interconnected networks, almost always using Internet Protocol. Layer 3 services refer to those delivered over interconnected networks, typically using Internet Protocol.
LFC	Local Fibre Company	Joint venture companies set up under the Ultra Fast Broadband Initiative between Crown Fibre Holdings and private parties to deploy and operate fibre networks.
LTE	Long Term Evolution technology	Long-term evolution is 4G technology which offers even faster data transfer speeds than 3G/HSPA, increases network capacity and is able to deliver sustained customer throughputs of between 6-12 Mbps in real network conditions.
MVNO	Mobile Virtual Network Operator	A mobile operator that does not own network infrastructure or spectrum licenses. Instead, MVNO’s have business arrangements with traditional mobile network operators to buy minutes of use for sale to their own customers.
PayTV	Pay Television	Subscription based television service.
PBX (UC)	Private Branch Exchange (Unified Communications)	Services for connecting and switching communications (e.g., mobile voice calls, messaging) between multiple users within a business, and to external parties. PBX systems allow multiple users within a business to make internal calls without using the PSTN, and also share a lower number of external connections to the PSTN, thereby lowering telephony costs. This functionality may be provided using customer

Abbreviation/ acronym	Definition	Description
		premises equipment (traditional PBX), or using service provider systems ("Centrex services").
POTS	Plain Old Telephone System	Traditional analogue voice telephony service. For broadband subscribers, this is typically provided over the same copper access line as broadband service, using multiplexing.
Radio Spectrum		Refers to a collection of various types of electromagnetic radiations of different wavelengths. Spectrum or airwaves are the radio frequencies on which all wireless communication signals travel.
RSP	Retail Service Provider	Retailers of broadband and fixed voice services.
RBI	Rural Broadband Initiative	The Rural Broadband Initiative is a joint project between Vodafone and Chorus for delivery of faster broadband services to rural New Zealand communities. This is being provided via rural fibre network upgrades, and build of new mobile sites. For further information refer to http://www.med.govt.nz/sectors-industries/technology-communication/communications/broadband-policy/rural-broadband-initiative.
SIP Trunking	Session Initiation Protocol Trunking	A service that enables companies to carry voice and video calls over traditional data networks (e.g., IP networks). This service is typically used to allow companies with compatible PBX equipment to carry voice traffic over data connections, reducing the requirement, and costs, for a traditional connection to the PSTN.
Sub-loop UCLL	Sub-loop Unbundled Copper Local Loop	The sub-loop refers to the copper circuit between a distribution cabinet to the end-user's premises (being a sub-circuit of the loop between the local exchange and the end-user's premises). Sub-loop unbundling refers to the regulatory process of allowing multiple telecommunications operators to lease the sub-loop from the infrastructure owner in order to provider services to end users.
TNAS	Telephone Network Access System	A system managed by TNAS Limited which controls the toll free number portability service that allows a customer to change their telecommunications service provider while retaining the same toll free number. This system co-ordinates the processes necessary for the allocation and porting of toll free numbers. The TNAS System is governed by the Toll Free Database Access Agreement.
UBA	Unbundled Bit-stream Access	UBA is a wholesale bit stream data service, which delivers data from a customer broadband connection to a Retail Service Provider's (RSP's) core network. DSLAM equipment is typically operated by the UBA service provider. RSPs can therefore use UBA services to supply broadband services to a customer, without having to install DSLAM equipment in an exchange. Naked UBA is UBA sold as a standalone service, while clothed UBA is UBA sold together with a Plain Old Telephone System voice service.
UCLFS	Unbundled Copper Low Frequency Service	Service that enables access to, and interconnection with, the low frequency spectrum on a line in a copper local loop network, for provision of voice services. The remaining high frequency spectrum may be used to provide broadband services (requiring purchase of a different service, e.g.

Abbreviation/ acronym	Definition	Description
		UBA).
UCLL, LLU or ULL	Local Loop Unbundled, or Unbundled Copper Local Loop	Local loop unbundling is the regulatory process of allowing multiple telecommunications operators to use connections from the telephone exchange to the customer's premises. The physical wire connection between the local exchange and the customer is known as a "local loop", and is owned by the incumbent local exchange carrier.
UFB	Ultra-Fast Broadband	Refers to the Ultra-Fast Broadband initiative, a Government funded initiative to deliver broadband availability at a minimum of 100 Mbps to 75% of New Zealanders by 2019. To achieve this fibre networks are being built by local fibre companies (LFCs), who must then sell open access to fibre networks to retail service providers (RSPs), without discrimination. Further information is available at www.crownfibre.govt.nz.
UMTS	Universal Mobile Telecommunications System	Third generation mobile cellular technology for networks based on the GSM standard.
Unified Comms	Unified Communications	Services for connecting and switching multiple forms of communications (e.g., mobile and fixed voice calls, messaging, voicemail services) between multiple users within a business, and to external parties. Unified Communications services expand private brand exchange functionality to management of other media – e.g. messaging and mobile calls. Typical UC services include single voice mail boxes for mobile and fixed telephony, and PBX-type services for switching internal company communications.
VDSL	Very High Speed Digital Subscriber Line	Digital Subscriber Line (DSL) technology capable of delivering broadband speeds over copper cables of up to 52 Mbps downstream and 16Mps Upstream. However, performance degrades significantly as loop lengths increase beyond 300m.
VoBB	Voice over Broadband	A voice over IP (VoIP) service delivered over a broadband connection. Typically refers to VoIP delivered over a digital subscriber line (DSL) connection.
VoIP	Voice over IP	VoIP commonly refers to the communication protocols, technologies, methodologies, and transmission techniques involved in the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet. Other terms commonly associated with VoIP are IP telephony, Internet telephony, voice over broadband (VoBB), broadband telephony, and broadband phone. VoIP services are typically deployed as a lower cost alternative to public switched telephone network (PSTN) based services.
WAN	Wide Area Network	Connectivity between two or more local-area networks, typically provided with circuits and switching equipment controlled by the service provider. Customers often use this service to connect computer networks between multiple office locations.
Wholesale backhaul		Wholesale backhaul is a service that access seekers can use to provide connectivity to transmit data from a network point close to end-users (e.g., a telephone exchange or mobile base station) to an interconnection point with their network.

Annexure C: Shareholding structure diagram for Vodafone Group Plc (upon completion)

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Annexure D: Shareholding structure diagram for TelstraClear Limited

Annexure E: Transaction documents

Annexure F: List of exchanges unbundled by each company

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Annexure G: Interested Parties Contacts

Name of interested party	Contact details	Contact person
Fixed line network owners		
Chorus Limited	Address: Level 8 Datacom House 68 - 86 Jervois Quay Wellington Postal Address: Chorus PO Box 632 Wellington 6140 New Zealand Telephone: 0800 600 100 Fax: Website: www.chorus.co.nz	**[ ]**
Ultrafast Fibre Ltd	Address: Ultrafast Fibre Ltd 114 Maui Street, Te Rapa Hamilton Postal Address: PO Box 925 Hamilton 3240 Telephone: 07 850 3100 Fax: 07-850 3210 Website:www.ultrafast.co.nz	**[ ]**
Northpower Ltd	Address: 28 Mt Pleasant Road Raumanga Whangarei 0110 Postal Address: Private Bag 9018 Whangarei Mail Centre Whangarei 0148 New Zealand Telephone: 09 430 1803	**[ ]**

Name of interested party	Contact details	Contact person
	Fax: 09-430 1804 Website:www.northpower.com	
Enable Networks	Address: The Lincoln Room, 1st Floor Twiggers Building 75 Jack Hinton Drive Addington Postal Address: PO Box 9228 Tower Junction Christchurch Telephone: 0800 434 273 Fax: 03-363 2961 Website: www.enablenetworks.co.nz	**[ ]**
Telecommunications retailers		
Telecom Corporation of New Zealand Ltd	Address: Level 2, Telecom Place 167 Victoria Street West Auckland1142 Postal Address: Private Bag 92028 Auckland Telephone: 0800 246 631 Fax: 04-801 9001 Website: www.telecom.co.nz	**[ ]**
Gen-i Ltd	Address: 167 Victoria Street West Auckland 1010 Postal Address: PO Box 92028 Auckland Telephone: 09 355 3756	**[ ]**

Name of interested party	Contact details	Contact person
	Fax: 09-309 3960 Website: www.gen-i.co.nz	
FX Networks Ltd	Address: Ground floor FX Networks House 138 The Terrace Wellington Postal Address: PO Box 24449 Manners St Wellington Telephone: 04 498 9640 Fax: 04 498 9649 Website: www.fx.net.nz/	**[ ]**
Vector Ltd	Address: Vector Centre 101 Carlton Gore Road Newmarket Auckland 1023 Postal Address: Vector Centre 101 Carlton Gore Road Newmarket Auckland 1023 Telephone: 09 978 7788 Fax: 09-978 7799 Website: www.vector.co.nz	**[ ]**
Woosh Wireless Ltd	Address: 128 Tory Street, Wellington Postal Address: 128 Tory Street, Wellington Telephone: 04 907 0058	**[ ]**

Name of interested party	Contact details	Contact person
	Fax: 09-520 3447 Website: www.woosh.com	
Kordia Group Ltd	Address: Level 4, Fidelity House 81 Carlton Gore Road Newmarket Postal Address: P O Box 2495 Auckland Telephone: 09 551 7000 Fax: 09-916 6403 Website: www.kordia.co.nz	**[ ]**
Orcon	Address: Building B 28 The Warehouse Way Akoranga Business Park Northcote North Shore City 0627 Postal Address: PO Box 302362 North Harbour Auckland 0751 Telephone: 0800 131 415 Fax: Website: www.orcon.net.nz	**[ ]**
2degrees Limited	Address: 131 Khyber Pass Road, Grafton, Auckland 1010 Postal Address: Two Degrees Mobile Limited PO Box 8355 Symonds Street Auckland, 1150 Telephone:	**[ ]**

Name of interested party	Contact details	Contact person
	09-919 7000 Fax: 09-919 7001 Website: www.2degreesmobile.co.nz	
Compass Communications Ltd	Address: 162 Grafton Road, Auckland CBD Postal Address: P O Box 2533, Shortland Street, Auckland 1140 Telephone: 09 965 2200 Fax: 09-965 2270 Website: www.compass.net.nz	**[ ]**
CallPlus Service Ltd	Address: Level 4 CallPlus Business Centre, 110 Symonds Street, Auckland 1010 Postal Address: P O Box 108109, Symonds Street, Auckland 1150 Telephone: 09 915 7575 Fax: 09-915 7589 Website: www.callplus.co.nz	**[ ]**
WorldxChange Communications Ltd	Address: Level 11 Tower Two, 55-65 Shortland Street, Auckland Central, Auckland 1010 Postal Address: P O Box 3296, Shortland Street, Auckland 1140	**[ ]**

Name of interested party	Contact details	Contact person
	Telephone: 09-308 1300 Fax: 09-308 1301 Website: www.wxc.co.nz	
Snap Internet Ltd	Address: 21 Durham Street South, Sydenham, Christchurch 8023 Postal Address: P O Box 8540, Riccarton, Christchurch 8440 Telephone: 03-348 8747 Fax: 03-343 2895 Website: www.snap.net.nz	**[ ]**
Trustpower Ltd	Address: TrustPower Building, Truman Road, Mount Maunganui, Tauranga 3116 Postal Address: Private Bag 12023, Tauranga Mail Centre, Tauranga 3143 Telephone: 07-574 4754 Fax: 07-574 4803 Website: www.trustpower.co.nz	**[ ]**
HP	Address: HP House 22 Viaduct Harbour Avenue Auckland 1010 Postal Address: P.O Box 3860, Shortland Street,	**[ ]**

Name of interested party	Contact details	Contact person
	AUCKLAND Telephone: 09 918 9555 Fax: 09-918 9556 Website: www.hp.co.nz	
Dimension Data New Zealand Ltd	Address: Dimension Data House, Level 1 99-105 Customhouse Quay, Wellington, 6011 Postal Address: P O Box 2397, Wellington 6140 Telephone: 04 470 1650 Fax: 04-470 1666 Website: www.datacraft.co.nz	**[ ]**
Datacom Group Ltd	Address: Level 9 South Tower, 68-86 Jervois Quay, Wellington 6011 Postal Address: P O Box 2063, Marion Square, Wellington 6141 Telephone: 04-460 1500 Fax: 04-470 1666 Website: www.datacraft.co.nz	**[ ]**
IBM New Zealand Limited	Address: Level 10 & 11 The Majestic Centre, 100 Willis Street, Wellington 6011 Postal Address: P O Box 38993, Wellington Mail Centre, Lower Hutt 5045 Telephone:	**[ ]**

Name of interested party	Contact details	Contact person
	04-576 5999 Fax: 04-576 5669 Website: www.ibm.com	
Unysis New Zealand Limited	Address: 56 The Terrace, Wellington 6011 Postal Address: P O Box 3240, Wellington 6140 Telephone: 04-462 2000 Fax: 04-462 2244 Website: www.unisys.co.nz	**[ ]**
(a)	**Regulatory bodies**	
TUANZ	Address: Level 9/19-21 Como Street Takapuna 0622 Postal Address: P O Box 331014 Takapuna North Shore Mail Centre Auckland 0740 Telephone: 09 488 1888 Fax: Website: www.tuanz.org.nz	**[ ]**
Telecommunications Carrier Forum	Address: Building C, Level 14 - 22 Triton Drive Albany Auckland 0632 Postal Address: PO Box 302469 North Harbour Auckland 0751 Telephone: 09 475 0203	**[ ]**

Name of interested party	Contact details	Contact person
	Fax: 09 479 4530 Website: www.tcf.org.nz	
Fixed Line Customers (five largest)		
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**
Mobile customers (five largest)		
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**
[ ]	**[ ]**	**[ ]**

Annexure H: 2011 Annual report of Vodafone Group Plc

Annexure I: 2011 Annual report of Telstra Corporation Limited

Annexure J: 2011 Annual report of TelstraClear Limited