



COMMERCE COMMISSION

Decision No. 471

Determination pursuant to the Commerce Act 1986 in the matter of an application for clearance of a business acquisition involving:

VECTOR LIMITED

and

UNITEDNETWORKS LIMITED

The Commission: MJ Belgrave
DR Bates QC
DF Curtin

Summary of Application: The acquisition by VECTOR Limited or any interconnected body corporate of up to 100% of the shares in the capital of, and some or all of the assets of the business carried on by UnitedNetworks Limited.

Determination: Pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition.

Date of Determination: 23 August 2002

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THE PROPOSAL

1. On 26 July 2002 the Commission registered a notice pursuant to section 66(1) of the Commerce Act 1986 (the Act), from VECTOR Limited (VECTOR or the Applicant) or any interconnected body corporate of up to 100% of the shares in the capital of, and some or all of the assets of the business carried on by UnitedNetworks Limited (UNL).

THE PROCEDURES

2. Section 66(3) of the Act requires the Commission either to clear or to decline to clear a notice given under section 66(1) within 10 working days, unless the Commission and the person who gave notice agree to a longer period. A decision on the application was required by Friday 9 August 2002, however the Commission sought two time extensions of five working days, and accordingly, a decision was required by Friday 23 August 2002.
3. The Commission's determination is based on an investigation conducted by staff.
4. The Commission's approach is based on principles set out in the Commission's *Practice Note 4*.¹

THE PARTIES

VECTOR Limited

5. VECTOR is owned 100% by the Auckland Energy Consumer Trust. VECTOR owns and operates electricity network infrastructure in the Auckland region. The network distributes power to more than 270,000 residential and commercial customers located in the Auckland, Manukau and Papakura districts, including Waiheke Island.
6. Prior to the electricity reforms of 1998, Mercury Energy Ltd owned the electricity distribution network now owned by VECTOR.
7. Tangent Limited, a wholly owned subsidiary of VECTOR, has installed fibre optic cables in parts of the Auckland CBD and in other parts of the VECTOR network area, which enable the provision of high speed data and broadband services to its business customers.

UnitedNetworks Limited

8. UNL is a company incorporated in New Zealand and listed on the New Zealand Stock Exchange. UNL owns and operates electricity lines in Wellington, Waitemata, North Shore and Bay of Plenty, and fibre optic broadband telecommunications networks in the Auckland and Wellington CBDs. In addition UNL owns and operates low pressure gas

¹ Commerce Commission, *Practice Note 4: The Commission's Approach to Adjudicating on Business Acquisitions Under the Changed Threshold in section 47 – A Test of Substantially Lessening Competition*, May 2001.

distribution pipelines in Auckland, Hawkes Bay, Palmerston North/ Manawatu, and Wellington

9. Prior to the electricity reforms of 1998, Power New Zealand Limited was the owner of the UNL networks in North Auckland and Waitemata, and in the Thames Valley and Coromandel Peninsula regions.
10. UNL purchased TransAlta's network serving Wellington and the Hutt Valley in December 1998, and TrustPower's western Bay of Plenty network, together with its subdivisional networks embedded in VECTOR's network in January 1999.
11. In February 2001 UNL completed its fibre optic networks in the Auckland and Wellington CBDs. These were laid out in the existing network of redundant gas reticulation ducts that UNL acquired when it purchased the gas distribution assets of Orion in May 2000.

OTHER RELEVANT PARTIES

Telecom New Zealand Limited (Telecom)

12. Telecom is a wholly owned subsidiary of Telecom Corporation of New Zealand Limited. Telecom is a supplier of a broad range of telecommunication services in New Zealand including fixed line and mobile voice, data, wireless, broadband and narrowband Internet, and wireless services to business and residential customers. It owns the Xtra ISP.
13. Telecom owns fibre-optic, wireless and copper based networks throughout New Zealand providing both local access and backbone capacity.

TelstraClear Limited (TelstraClear)

14. TelstraClear was formed from the integration of TelstraSaturn Limited and CLEAR Communications Ltd in December 2001.² TelstraClear is New Zealand's second largest telecommunications company, offering voice, broadband and narrowband Internet, data, wireless, e-commerce and cable TV services to residential and business customers. TelstraClear also runs the ISPs Paradise.net and CLEARNet, and has fibre optic networks in the CBDs of Auckland, Wellington, and Christchurch.
15. In addition, TelstraClear owns a fibre-optic backbone system that carries voice and data traffic nationally. It has a digital microwave broadband network, and also has a submarine fibre optic cable connecting Auckland, Wellington and Christchurch that carries voice and data traffic.

Walker Wireless Limited (Walker Wireless)

16. Walker Wireless is a broadband fixed wireless operator. It has points of presence (POPs) in Whangarei, Auckland, Tauranga, Hamilton, Napier, Wanganui, Palmerston North, Wellington, Christchurch and Dunedin. It also provides some residential services and wholesales wireless access to other carriers such as [].

² Decision 447, *Telstra Corporation Limited/Telstra Saturn Limited and Clear Communications Limited*, 7 December 2001.

CityLink Limited (CityLink)

17. CityLink is a network access provider. It provides two network access products – dedicated private fibre access circuits and links which it leases to customers, and broadband public local area network (LAN) ethernet services which provide high speed network connections between Internet users and ISPs. CityLink has installed fibre optic cable networks in the Auckland and Wellington CBDs. Its main customers are Government departments and businesses such as banks. TelstraClear owns approximately 26% of the shares in CityLink and has two directors on its board. The Commission considers that TelstraClear’s interest in CityLink is sufficient to make it an associated person with CityLink and has therefore aggregated the market shares of TelstraClear and Citylink.

Orcon Internet (Orcon)

18. Orcon is a privately owned company that provides the back-end network architecture for around 40 of New Zealand’s Internet Service Providers (ISPs), supplying them with lines, Internet bandwidth, and customer billing software. In addition, Orcon is itself an ISP with around 30,000 customers, making it the fourth largest ISP in New Zealand.³

Compass Communications (Compass)

19. Compass Communications is a privately owned New Zealand company which owns and operates a national and international telecommunications network, providing voice, fax and data services to small to medium enterprises. Compass recently acquired Radionet, a broadband fixed wireless operator and an ISP with Points of Presence (POPs) in Whangarei, Auckland, Pukekohe, Rotorua, Palmerston North, Christchurch and Queenstown. Radionet operates on public frequency.

DATA SERVICES

20. This includes private data network services such as leased lines, frame relay, ATM and managed IP services, and public data network services. Data services may be switched or dedicated. A switched service uses a dial-up connection that is only available for a limited period of time. These services are used by customers who do not require a permanent connection, for example where data can be transmitted in intermittent bursts of varying volumes. A dedicated service is based on a dedicated line that is continuously and exclusively available to a particular customer.
21. The basic components of a data circuit are essentially wholesale services used in the production of retail data services. To provide such services, competing carriers require access to the various constituent parts of an “end-to-end” data circuit. The “local access” component of a data circuit refers to the physical connection between a customer and a local exchange. Such a connection may be achieved in a number of ways, for example over standard copper telephone lines, fibre optic lines, or through the use of wireless or satellite technology. The backbone is larger transmission pipes that run between exchanges and carry data gathered from smaller lines that interconnect with it.

³ PC World, 2 July 2002.

Types of Service Providers

22. Many of the industry participants differ in the nature of the services they provide. Some important distinctions include:

- *Facilities based v services based* – facilities based carriers provide services by directly connecting customers to their own networks. Other carriers with less substantial infrastructure rely on obtaining access and transmission services from facilities based carriers.
- *Wholesale v retail* – some carriers mainly provide wholesale services, some offer only retail services, while others are fully integrated and offer a range of wholesale and retail services.

MARKET DEFINITION

23. The Act defines a **market** as:

... a market in New Zealand for goods or services as well as other goods or services that, as a matter of fact and commercial common sense, are substitutable for them.

24. The Commission will seek to define relevant markets in a way that best assists the analysis of the competitive impact of the acquisition under consideration. A relevant market will ultimately be determined, in the words of the Act, as a matter of fact and commercial common sense.

25. Where markets are difficult to define precisely, the Commission will initially take a conservative approach. If the proposed acquisition can be cleared on the basis of a narrow market definition, it would also be cleared using a broader one. If the Commission is unable to clear the proposed acquisition on the basis of the narrower market, it will be necessary to review the arguments and evidence in relation to broader markets.

26. The Applicant submitted that the markets relevant to the proposed merger are:

- The national electricity network maintenance contract and services market.
- The national market for the construction of new networks.
- The provision of gas distribution services in separate geographic markets corresponding to UNL's distribution networks located in the:
 - Auckland region;
 - Hawkes Bay region;
 - Manawatu region;
 - Horowhenua region; and

- Wellington region.
- The provision of line services to electricity retailers and end use customers in separate geographic markets corresponding to the distribution networks, being:
 - VECTOR's Auckland network;
 - UNL's North Auckland network (North Shore, Waitakere and Rodney);
 - UNL's Eastern region network (Thames Valley, Coromandel, Western Bay of Plenty, Tauranga, Rotorua and Taupo); and
 - UNL's Wellington region network (Wellington, Hutt Valley and Porirua Basin).
- The wholesale market for data access in the Auckland CBD.

27. VECTOR submitted that aggregation would not occur in relation to the national electricity network maintenance contract and services markets, or the national market for the construction of new networks. This is for the reason that VECTOR contracts out these services to third parties, and UNL sold its contracting field services to Siemens in July 2001. The Commission concurs with the Applicant's view and will not further discuss those markets in respect of the current proposition.

28. In addition, the Applicant submitted that as VECTOR does not currently own gas distribution assets, aggregation would not occur in the separate geographic markets for gas distribution. Furthermore, the Applicant contended that in Decision 435⁴ at paragraph 26, the Commission found there to be discrete electricity and gas product markets.

29. The Commission also concurs with this view and will not further discuss the gas distribution markets in respect of the current proposition.

Electricity Distribution

30. The Commission, in assessing mergers of power companies, has previously considered a number of related markets. Generally, the Commission concluded that there were:

- a national electricity generation and wholesaling market;
- a national electricity network contracting services market;
- a national market for the ownership and operation of new distribution networks;
- distinct geographic markets corresponding to the distribution networks of the merging parties for electricity distribution to small consumers; and
- a national market for the retailing of electricity to medium and large consumers.

31. These market definitions were consistent with the earlier High Court judgment in *Power New Zealand Ltd v Mercury Energy Ltd* [1996] ("PNZ v Mercury") 1 NZLR 686, subsequently upheld in February 1997 by the Court of Appeal, which found at p 709:

⁴ Decision 435, *Natural Gas Corporation Holdings Limited and AGL NZ Energy New Zealand*, 8 June 2001.

...that there should be separate product markets in distribution; in supply of delivered electricity to small customers; and in retailing to medium and large customers. There are also separate product markets for electricity wholesaling; for transmission; and for construction of new networks. The ownership and operation of new networks, once formed, should be treated as forming part of the relevant distribution market.

As to geographic scope, the distribution markets and the small customer markets are local/regional in scope. The remainder are national in scope.

32. *PNZ v Mercury* concerned the electricity distribution assets currently owned by VECTOR and UNL. The boundaries of these networks have remained relatively unchanged over the intervening period.
33. Therefore, the Commission considers, that in this instance, the appropriate market definitions are those for the distribution of electricity as defined by the networks of the merging entities, being:
- the markets for the distribution of electricity in the Auckland, North Auckland and Waitakere, Eastern, and Wellington regions.

Data Access

34. At paragraph 11.1 of the application, the applicant states that:

“The only market in which aggregation is likely is the wholesale market for data access in the Auckland CBD. Tangent and UNL Communications each provide data access services to businesses in the Auckland CBD, via their fibre optic networks.”

35. The applicant refers to the Commission’s earlier decision on the merger between TelstraSaturn and Clear Communications, Decision 447. In that decision, the Commission concluded that there was a wholesale market for data access in the Auckland CBD. This market refers to local access networks over which data services can be supplied. Such local networks provide key connections between a network termination point at a customer site and a network switch housed in a digital exchange. Connections may be made by way of a number of media, such as standard copper lines, fibre optic lines, wireless radio or satellite links, or a mix of these technologies.
36. In Decision 447, a number of parties spoken to supported the use of distinct markets for local access and transmission. For example, UNL argued that:

...there are separate markets for the operation and management of networks/the provision of network services and the retail supply of various communications products and services.

The network market is divided into:

- *transmission – the “backbone” between regional centres. ...*
- *local networks – ie networks in regional centres and CBDs.*

37. CityLink and the applicant in that case, TelstraSaturn, both referred to distinct wholesale markets for local access and backbone transmission. Telecom was the only party that

disputed the distinction, noting that it sells data circuits on a wholesale basis and that there is no such product as a “data tail”.

38. The Commission believes that it is helpful for the purposes of competition assessment to maintain a distinction between local access and backbone transmission networks. In terms of the provision of retail “end-to-end” data services, both local access and backbone transmission may be required by the service provider. For example, as noted earlier, UNL owns local fibre networks in the Auckland and Wellington CBDs. In order to supply its customers with a complete circuit that originates in one CBD and terminates in the other, UNL leases intercity capacity on a backbone such as that operated by BCL. UNL’s channel partners are therefore able to use such a combination of local access and backbone to supply data services between the two centres.
39. A number of parties spoken to as part of the current investigation have indicated that there may be separate markets for high-speed and low-speed data access. The speed of a data circuit refers to the volume of data that can be sent along that circuit, and this is typically expressed in bits per second. Circuit speeds usually increase in discrete steps; for example 64 kilobits per second (kbps), 128 kbps, 256 kbps, 512 kbps, 1.024 Megabits per second (Mbps), and so on. Lower speed services can be provided through a number of media, such as copper and wireless connections, while higher speed services tend to be provided by way of fibre connections.
40. From the demand side, there may be limited substitution between speeds, as the functionality of a service is often closely tied to the circuit capacity required to deliver that service. For example, a customer requiring high bandwidth services such as high-speed Internet access, videoconferencing, or access between local area networks could not receive these services through low bandwidth circuits. A bank requiring its branches to be connected to a central customer database is likely to require a relatively large connection; switching to a low capacity circuit would lead to lengthy and unacceptable delays in the transfer of data.
41. However, there may be substitution possibilities on the supply-side. A number of technologies have emerged in recent years that have increased the capacity of existing connections. For example, Digital Subscriber Line (DSL) technologies have increased the maximum amount of data that can be delivered over copper connections, while other technologies can be used to expand the capability of fibre and wireless networks.
42. In a recent consultation document,⁵ the Office of Telecommunications (Oftel) in the United Kingdom argued that supply-side substitution is likely to occur, and as a result, no distinction in terms of capacity is required. Oftel believes that existing suppliers of high capacity segments are likely to switch into low capacity in response to a price increase, and vice versa. This is because the costs of providing capacity is largely independent of bandwidth, and so the costs of switching supply from one to the other appear to be small. Oftel concluded that it is appropriate to identify one market for terminating segments at all bandwidths.
43. In Decision 447, the Commission did not distinguish between high-speed and low-speed capacity. In that decision, Telecom noted that the definition of “high-speed” is constantly changing. In other words, it may be difficult to know exactly where to make any capacity

⁵ “National leased lines: Effective competition review and policy options”, Oftel (August 2000).

distinction.⁶ The main issue in terms of whether to adopt a single market or separate bandwidth-based markets will be the extent to which wireless operators compete with fibre networks. The Commission has been informed that wireless operators can typically provide data services of up to 1 Mbps, but can go as high as 5 Mbps.⁷ Tangent and UNL tend to provide up to 100 Mbps service. Any competitive constraint exercised by wireless operators will therefore tend to be at the lower end of the market.

44. The Commission is therefore of the view that for the purposes of the proposed acquisition, it is appropriate to define the relevant market without distinguishing between low and high bandwidths.
45. In defining the geographic dimension of telecommunications markets, the Commission has previously considered the extent of emerging network competition. In Decision 447, reference was made to a similar approach taken by the ACCC:⁸

Substitutability tests tend to be of limited relevance when delineating the geographical dimensions of telecommunications markets. For example, a local call in one capital city is unlikely to be substitutable for one made in another capital city. Accordingly, in delineating the geographical dimension of telecommunications markets, the Commission looks to factors such as the area over which major suppliers operate to ensure that it describes the relevant arena of competition.

46. Both UNL and the Applicant, through its subsidiary Tangent, have built their data networks throughout the Auckland CBD. The Tangent network extends [], although most of the network fill appears to have taken place within the CBD. Telecom has extensive network coverage throughout New Zealand, while TelstraClear also has built a fibre network in the Auckland CBD (as well as other CBDs throughout New Zealand). Citylink has constructed a fibre network in the Wellington CBD, and also has some limited fibre in central Auckland.
47. As the proposed acquisition involves aggregation only within the Auckland CBD, this is taken as the appropriate geographic boundary of the data access market for the purposes of analysing the current application.
48. In summary, the Commission has revisited the market definition used in its recent decision to clear the merger between TelstraSaturn and CLEAR Communications, and believes that it is appropriate to retain the same market definition used in that decision. The Commission has therefore adopted the wholesale data access market in the Auckland CBD for the purposes of assessing the current application.

Conclusion on Market Definition

49. The Commission concludes that the relevant markets are as follows:

- the markets for the distribution of electricity in the Auckland, North Auckland and Waitakere, Eastern, and Wellington regions; and

⁶ OfTel has made the same point. See *ibid*, paragraph 3.42: “distinguishing between markets for high and low bandwidth terminating segments creates the difficulty of deciding the bandwidth at which it is appropriate to make the distinction.”

⁷ A number of parties (such as UNL client HDS) said that the capacity limitations of wireless technology are becoming less of an issue than they have been in the past.

⁸ ACCC: “Anti-competitive conduct in telecommunications markets – An information paper” (August 1999), page 34.

- the wholesale data access market in the Auckland CBD.

COMPETITION ANALYSIS

Substantially Lessening Competition

50. Section 47 of the Act prohibits particular business acquisitions. It provides that:

A person must not acquire assets of a business or shares if the acquisition would have, or would be likely to have, the effect of substantially lessening competition in a market.

51. Section 2(1A) provides that substantial means “real or of substance”. Substantial is taken as meaning something more than insubstantial or nominal. It is a question of degree.⁹ What is required is a real lessening of competition that is not minimal. The lessening needs to be of such size, character and importance to make it worthy of consideration.¹⁰

52. Section 3(2) provides that references to the lessening of competition include references to the hindering or preventing of competition.¹¹

53. While the Act defines the words “substantial” and “lessening” individually it is desirable to consider the phrase as a whole. For each relevant market, the Commission will assess:

- the probable nature and extent of competition that would exist in a significant section of the market, but for the acquisition (the counterfactual);
- the nature and extent of the contemplated lessening; and
- whether the contemplated lessening is substantial.¹²

54. In interpreting the phrase “substantially lessening competition”, the Commission will take into account the explanatory memorandum to the Commerce Amendment Bill (No 2). The memorandum notes that:

Two of the 3 key prohibitions are strengthened to bring New Zealand into line with Australian competition law, which will facilitate a more economic approach to defining anti-competitive behaviour.

and, in relation to s47:

⁹ *Commerce Commission v Port Nelson Ltd* [1995] 6 TCLR 406, 434; *Mobil Oil Corporation v The Queen in Right of NZ* 4/5/89, International Centre for Settlement of Investment Disputes, Washington DC, International Arbitral Tribunal ARB/87/2 (paras 8.2, 19, 20).

¹⁰ *Dandy Power Equipment Ltd v Mercury Marina Pty Ltd* [1982] ATPR 40-315, 43-888; *South Yorkshire Transport Ltd v Monopolies & Mergers Commission* [1993] 1 All ER 289.

¹¹ For a discussion of the definition see *Commerce Commission v Port Nelson Ltd*, supra n 6, 434.

¹² See *Dandy*, supra n 5, pp 43–887 to 43-888 and adopted in *New Zealand: ARA v Mutual Rental Cars* [1987] 2 NZLR 647; *Tru Tone Ltd v Festival Records Retail Marketing Ltd* [1988] 2 NZLR 352; *Fisher & Paykel Ltd v Commerce Commission* [1990] 2 NZLR 731; *Commerce Commission v Carter Holt Harvey*, unreported, High Court, Auckland, CL 27/95, 18/4/00.

This proposed new threshold is the same as the threshold for these types of acquisitions in section 50 of the Trade Practices Act 1974 (Australia).

55. For the purposes of the analysis, the Commission takes the view that a lessening of competition and a strengthening of market power may be taken as being equivalent, since they are the two sides of the same coin. Hence, it uses the two terms interchangeably. Thus, in considering whether the acquisition would have, or would be likely to have, the effect of substantially lessening competition in a market, the Commission will take account of the scope for the exercise of market power, either unilaterally or through co-ordination between firms.
56. When the impact of enhanced market power is expected predominantly to be upon price, the anticipated price increase relative to what would otherwise have occurred in the market has to be both material, and able to be sustained for a period of at least two years, for the lessening, or likely lessening, of competition to be regarded as substantial. Similarly, when the impact of increased market power is felt in terms of the non-price dimensions of competition, these also have to be both material and able to be sustainable for at least two years for there to be a substantial lessening, or likely substantial lessening, of competition.

The Counterfactual

57. The Commission uses a forward-looking, counterfactual type of analysis in its assessment of business acquisitions, in which two future scenarios are postulated: that with the acquisition in question, and that in the absence of the acquisition (the counterfactual). The impact of the acquisition on competition can then be viewed as the difference between those two scenarios. It should be noted that the status quo cannot necessarily be assumed to continue in the absence of the acquisition, although that may often be the case. For example, in some instances a clearly developing trend may be evident in the market, in which case the appropriate counterfactual may be based on an extrapolation of that trend.
58. Given that a number of parties have indicated to UNL that they intend to bid for UNL's gas distribution, electricity distribution, and fibre optic assets, in the current case, it appears that the most likely counterfactual would be those assets under ownership of another party.
59. The Commission therefore has adopted the counterfactual as UNL's assets being owned by a third party independent of VECTOR.

Competition Analysis Principles

60. The Act prohibits business acquisitions that would be likely to have the effect of substantially lessening competition in a market. The Commission makes this assessment against a counterfactual of what it considers would be likely to happen in the absence of the acquisition. A substantial lessening of competition is taken to be equivalent to a substantial increase in market power. A business acquisition can lead to an increase in market power by providing scope either for the combined entity to exercise such power unilaterally, or for the firms remaining in the market to co-ordinate their behaviour so as to exercise such power.

61. In broad terms, a substantial lessening of competition cannot arise from a business acquisition where there are sufficient competitive constraints upon the combined entity.

MARKETS FOR THE DISTRIBUTION OF ELECTRICITY IN THE AUCKLAND, NORTH AUCKLAND AND WAITAKERE, EASTERN, AND WELLINGTON REGIONS.

62. VECTOR and UNL are natural monopolists in their respective geographic areas for the distribution of electricity.
63. The acquisition by VECTOR of UNL will result in the expansion of VECTOR's monopoly over a larger geographical area in the greater Auckland region, and transfer the monopoly of UNL in the Eastern and Wellington electricity distribution networks to VECTOR.
64. The competitive effect of this acquisition by one lines company of another (the lines companies now known as UNL and VECTOR) was further examined by the Court of Appeal in *Power New Zealand Limited v Mercury Energy Limited* [] (“*PNZ v Mercury CA*”) 2 NZLR 669. In *PNZ v Mercury CA* the competition analysis was under the previous threshold of dominance. It was held that the transfer of Power New Zealand's monopoly to Mercury and the consequent expansion of Mercury's monopoly over a larger geographical area did not alter the character of its existing market dominance.
65. The Court held that section 48 (now repealed) which allowed for a bare transfer of a dominant position, applied to the acquisition. The Court noted that section 48 allowed a technical acquisition of dominance when it was in effect only a bare transfer of dominance, with no increase in market power arising from the acquisition. Of most relevance to the present application is the finding of the Court that there would be “no effect on competition”.
66. Section 48 was repealed when the threshold for examination of mergers and acquisitions changed from dominance to one of substantially lessening of competition. The bare transfer of dominance exemption then became redundant. If an acquisition's only effect would be a bare transfer of dominance, there would be no lessening of competition and the acquisition would not breach the Act.
67. The analysis under Section 48 in *PNZ v Mercury CA* remains relevant. As the Court found that the acquisition of the North Shore network by the owner of the Auckland network would amount only to a bare transfer of dominance, it was effectively saying that the acquisition at that time would not affect the existing level of competition or market power in the relevant market.

Cross-border competition

68. A possible issue arises with respect to the removal of potential cross-border competition between VECTOR and UNL. There is a potential for some limited competition on the geographic fringe of the markets. However, it is to be noted that the High Court in *PNZ v Mercury* was extremely sceptical of the degree of cross-border competition that was likely to occur in reality.

69. The distribution networks of VECTOR and UNL share only one common boundary, that in the Avondale/New Lynn region covering the Rosebank, Patiki and Portage Road areas where there are a number of small to medium sized industrial companies.
70. In June 1997, Commission staff investigated the potential for cross-border competition on the common border between VECTOR and UNL's Auckland networks¹³ and concluded at that time that:

...there is no loss of constraint on the post acquisition entity, due to the removal of cross-border competition between Mercury and PNZ (Power New Zealand)...

71. Commission staff have again investigated the common boundary between VECTOR and UNL and have concluded that little if any cross-border competition exists. No customers have switched between networks and those parties on the boundary that were contacted by Commission staff were unaware that potentially they had a choice of distribution company.
72. VECTOR and UNL advised the Commission that pricing in the areas immediately adjoining the common border is based on the cost of supply and does not distinguish within the networks with differing rates by region, only by customer category by volume.

Embedded Networks

73. In the 1990s, TrustPower embarked on an aggressive network construction and ownership strategy in the Auckland region. At that time, TrustPower competed vigorously for network construction in new subdivisions, in a bid to secure retail customers without having to launch an expensive marketing campaign to lure customers from other retailers. As the Electricity Industry Reform Act 1998 required the separation of electricity distribution and supply functions, TrustPower sold its electricity distribution interests to UNL.
74. The UNL networks embedded in the VECTOR network are as follows: Vestey Drive, Ti Rakau Village, Guys Block, Dannemora Subdivision, De Havilland Drive, Robert Ross Place, Waimahia Ave, Zelian Drive, 5 Pacific Rise, and Rockridge Avenue. There are approximately 2,200 active ICPs connected to these networks, which represents less than 1% of VECTOR's customer base of around 275,000.
75. 11 kV lines from VECTOR supply all the networks. None of the networks can be economically supplied independent of VECTOR, by reason of their distance from Transpower GXP, the undergrounding of cables requirement and/or their lack of critical load. They are engineered to supply electricity to customers located in the subdivision. Extending the networks to supply customers in the surrounding areas is unlikely to be feasible to any significant degree, without substantial investment being made to support the increased load. VECTOR regards these networks as large customers, and not competitors.
76. Pricing at the edges of the embedded networks does not vary from either UNL or VECTOR's residential charges on the remainder of the their networks. In addition, customers do not appear to have switched between networks.

¹³ Decision 299, *A joint Venture Company of Mercury Energy Ltd and Utilicorp Ltd Inc and Power New Zealand Limited*, 27 June 1997.

77. UNL did not build the networks in question, nor, aside from completing the reticulation as the subdivision is completed, has it constructed a new network in VECTOR's supply area since acquiring these networks from TrustPower in 1998.
78. Through the 1980s and 1990s a property development company, Southpark Corporation (Southpark), acquired a number of properties in the VECTOR network area, including the Southdown Freezing Works, Shortland Freezing Works and the Taniwha Works. Southpark has developed these properties into industrial estates and carried out the associated electricity reticulation. Southpark advised the Commission that in its opinion, the proposed acquisition would have no effect on the contestability of electricity network construction in new subdivisions in the VECTOR network area.
79. The Commission concludes that there is minimal cross-border competition either on the Avondale/New Lynn border or on the borders of UNL's embedded networks, and that the proposed acquisition would have no, or a *de minimis*, effect on competition in the market.

Conclusion on Electricity Distribution Markets

80. In accordance with the reasoning of the Court of Appeal, the Commission concludes that the expansion of VECTOR's monopoly over a larger geographical area will not change the character of its market power or have any effect on competition. Accordingly the acquisition will not have the effect, or likely effect, of substantially lessening competition in the market.

THE WHOLESALE DATA ACCESS MARKET IN THE AUCKLAND CBD

Analysis of Existing Competition

Scope for Unilateral Market Power

Introduction

81. An examination of concentration in a market post-acquisition can provide a useful guide to the constraints that market participants may place upon each other, including the combined entity. Both structural and behavioural factors have to be considered. However, concentration is only one of a number of factors to be considered in the assessment of competition in a market. Those other factors are considered in later sections.
82. Market shares can be measured in terms of revenues, volumes of goods sold, production capacities or inputs (such as labour or capital) used. All measures may yield similar results in some cases. Where they do not, the Commission may, for the purposes of its assessment, adopt the measure that yields the highest level of market share for the combined entity. The Commission considers that this will lead to an appropriately conservative assessment of concentration, and that the factors which lead to the other different market share results are more appropriately considered elsewhere during the assessment of the acquisition.¹⁴

¹⁴ For example, where market share measured in terms of capacity produces a significantly lower share of the market in the hands of participants than a measure in terms of sales volumes, the constraint on a combined entity from that unemployed capacity might be taken into account when identifying near entrants or the constraint

83. In determining market shares, the Commission will take into account the existing participants (including ‘near entrants’). This is followed by a specification of the Commission’s ‘safe harbours’, an estimation of market shares, and an evaluation of existing competition in the market. Under the Commission’s safe harbours, a business acquisition is considered unlikely to substantially lessen competition in a market where, after the proposed acquisition, either of the following situations exist:

- where the three-firm concentration ratio (with individual firms’ market shares including any interconnected or associated persons) in the relevant market is below 70%, the combined entity (including any interconnected or associated persons) has less than in the order of a 40% share; or
- where the three-firm concentration ratio (with individual firms’ market shares including any interconnected or associated persons) in the relevant market is above 70%, the market share of the combined entity is less than in the order of 20%.

Existing Competition

84. The Auckland CBD is characterised by a considerable number of competing local network operators providing data access to customers. These include both fibre-based local networks as well as wireless local networks.
85. However, the application contained little information on the market shares of existing competitors. The applicant noted that Telecom and TelstraClear were the main providers of data access services in the Auckland CBD, although was unable to quantify the respective market shares. The applicant noted that there are a number of smaller network operators in the Auckland CBD, including its subsidiary Tangent, UNL Communications, CityLink, Walker Wireless, and Compass Communications.
86. The Commission has been provided with some information relating to the data networks that have been installed within the Auckland CBD. This information has enabled a revenues-based comparison of market shares. Additional information on contracted bandwidth and capacity was also obtained from a number of parties. However, this information was not sufficiently comprehensive or comparable to form the basis for an assessment of market share.
87. Market share estimates, based on annual revenues, for the fibre-based network operators are set out in Table 1 below.

Table 1: Estimated Market Shares, Auckland CBD

Company	Revenue (p.a)	
	(\$M)	(%)
Telecom	[]	[]
TelstraClear + CityLink	[]	[]
Walker Wireless	[] [#]	[]
Tangent	[]	[]
UNL	[] [*]	[]
RadioNet	[]	[]
Total	[] ⁺	100

- # estimate includes retail services provided directly to small business, residential customers. Separate retail/wholesale breakdown not available.
- * includes Wellington revenues.
- + total estimated by Tangent.

88. The above market share estimates indicate that the share of the merged entity will be approximately []%, which is within the Commission's safe harbours referred to above.
89. Several parties described both Tangent and UNL as 'boutique' or 'niche' operators with very small market shares. Tangent itself has estimated that its market share by revenue is approximately []%.
90. BCL also confirmed that UNL is a small operator, []%. While this by itself does not demonstrate UNL's market share in Auckland, it does provide some support for the qualitative and quantitative indications of the current relative size of UNL's operation.
91. As an adjunct to market share data based on revenues, the Commission considered whether it was possible, and relevant, to consider market shares based on capacity. However, the Commission notes that considerable care should be exercised in any discussion of the capacity of a network. This is for a number of reasons. First, the amount of capacity of a single strand of fibre can be significantly increased by the application of technologies which split transmission along the strand into different colours of light. When fibre strands are turned on or 'lit', data is transmitted in the form of light. By employing technologies which allow for different data signals to be carried on different wavelengths or colours of light, the capacity of a single strand of fibre can be expanded. The Commission understands that this technology has been used mainly in connection with high-volume backbone transmission routes, for example between Auckland and Wellington. However, the technology can potentially be applied to fibre networks such as those within the Auckland CBD.

92. Secondly, an installed fibre network may contain a certain number of fibre cables. However, those fibres may represent only a percentage of the physical capacity of the ducting. As most of the cost associated with installing an underground network is associated with laying the ducts, additional fibres can be inserted at relatively little cost. For example, a network operator may have installed a 96 fibre core, although the ducting may be able to accommodate up to 1000 fibres.
93. Furthermore, the Commission found it was not possible to specify meaningful comparative data on capacity with which it could quantitatively estimate market shares. However, it has received information on each of the main data networks in the Auckland CBD, which has enabled certain qualitative assessments.
94. Telecom and TelstraClear run fibre optic and copper-based connections to customers within the Auckland CBD. Telecom's local network is based on a mix of copper and fibre. Telecom has laid an extensive amount of fibre throughout Auckland, [].
Telecom has announced plans to develop a new integrated Internet Protocol (IP) network in conjunction with Alcatel, onto which Telecom intends to migrate its current voice and data networks. Telecom has advised that the new network will be based on existing fibre.
95. TelstraClear has a comprehensive fibre optic network running throughout the Auckland CBD. The predecessors to TelstraClear (TelstraSaturn and CLEAR Communications) each operated a fibre network comprised of a number of rings containing up to 144 strands of fibre. TelstraClear's fibre supports the delivery of Ethernet and IP services, which can deliver data throughput of up to 1 Gbps, as well as ATM services which can offer data transfer speeds of up to 155 Mbps.
96. UNL and Tangent have each built local fibre networks in Auckland's CBD, offering Ethernet access. UNL's optical fibre is typically able to deliver speeds of up to 1 Gbps per fibre. UNL's core network consists of 216-fibre cable, of which UNL estimates that approximately []% is currently lit.
97. Tangent provides a managed data network service [].
98. CityLink has also recently been installing a fibre network in downtown Auckland. This move was initially prompted by a Wellington-based customer requiring a connection in Auckland. At the time, a number of utilities had opened up trenches in the Auckland CBD and this provided CityLink with the opportunity to install some ducting. CityLink has since installed approximately [] kilometres of ducting, and has wired [] buildings, throughout the Auckland CBD. The number of fibre optic cables installed by CityLink ranges from [] to [] per route. CityLink estimates that on average, []% of its installed fibre cables are currently utilised.
99. In addition to the fibre operators, fixed wireless local access networks have been developed by companies such as Walker Wireless and Compass. For example, Walker Wireless has installed a point-of-presence (POP) on Sky Tower in Auckland, as well as other POPs throughout New Zealand. Decision 447 noted that a limitation of wireless local access networks is that they use 'line-of-sight' technology, which is not always

suitable for built-up CBDs. However, Walker Wireless has informed the Commission that it is currently switching to non-line-of-sight technology, and has installed four cellsites around Auckland based on the new technology. Other advances in technology have improved the service capability of fixed wireless networks.¹⁵

100. The constraint from wireless operators is likely to be at the lower capacity end of the market. For example, data services provided by Compass start at 64kbps and go up to 1 Mbps; Walker Wireless has developed a wireless modem that is suitable for speeds from 128 kbps to 1 Mbps. Tangent advised that most of its business is based on services between [], although it can provide connections of up to []. UNL provides services from 1 Mbps up to 1 Gbps.
101. As noted earlier, wireless operators currently tend to deliver service speeds of up to 1 Mbps, although speeds of up to 5 Mbps are possible. A number of parties noted that wireless is not suitable for providing services at speeds higher than this. A number of other issues have been raised in relation to wireless technology. First, some parties indicated that wireless transmission may be less secure than wire-based networks. However, both wireless operators noted that encryption of data has improved security of wireless transmission, and that this is no longer likely to be any more of an issue than it is for fibre networks. A second issue is possible interference of wireless signals, although this appears to be more of an issue for Compass, which uses public, unlicensed spectrum. Walker Wireless uses its own spectrum for transmission, and so its network appears to be less susceptible to interference.
102. Having considered the above limitations of wireless technology, the Commission accepts that the existing fixed wireless local operators may provide some constraint to fixed local networks, although only in terms of services up to a current ceiling of around 1 Mbps.
103. Most parties believe that the proposed merger will have little impact in terms of the level of competition. The Auckland CBD will remain competitive, with the merged entity constrained by the likes of Telecom and TelstraClear. The presence of significant excess capacity (indicated by the low proportion of fibres that are lit), in conjunction with very low marginal costs associated with lighting additional fibres, is likely to maintain competitive pressures. CityLink may also provide some constraint, though it currently has limited infrastructure in Auckland and is associated with TelstraClear.
104. Customers requiring high-capacity data access in Auckland use Tangent and UNL, as well as Telecom and TelstraClear. Some parties have found UNL easier to deal with, others Tangent. The vertically integrated carriers tend to promote value-added services rather than the basic raw or 'dark' fibre offered by UNL; however, Orcon has noted that Telecom's 'LAN extension' product competes with UNL, while TelstraClear offers several products that are similar to UNL services. Vodafone also noted that TelstraClear supplies a dark fibre service.
105. The Applicant has noted that Tangent's very low market penetration is largely due to a lack of scale and its inability to offer bundled services in the way that the two larger

¹⁵ For example, Compass Communications referred to technologies that alter the modulation of a wireless signal, enabling greater amounts of data to be conveyed within the same wireless frequency.

carriers can. CityLink also noted that Telecom in particular has an advantage in terms of the scale and scope of the services it can offer.

Conclusion on Unilateral Market Power

106. The proposed acquisition will result in a concentration of fixed network operators in the Auckland CBD, from 5 to 4. However, the Commission believes that the merged entity will be constrained by the remaining fixed operators, in particular TelstraClear and Telecom. The Commission concludes that the merged entity is likely to have a relatively small share of the Auckland CBD market measured in terms of revenues. Furthermore, the Commission notes that both Tangent and UNL appear to have achieved relatively low levels of penetration, in terms of the number of buildings wired onto their networks, compared to the larger fibre operators.
107. For a number of reasons discussed above, market shares based on installed capacity have been difficult to determine, and any such data needs to be interpreted with care. The installation of surplus capacity is a feature of the provisioning of fixed telecommunications networks, and the Commission is aware that there is currently considerable unutilised capacity in the Auckland CBD, and that this is likely to continue.
108. In addition, some constraint is likely to be provided by the two existing wireless operators, although the Commission acknowledges that such constraint is only likely to be effective for lower bandwidth services.
109. The Commission has therefore concluded that the merged entity will continue to be constrained by existing competition within the market.

Scope for the Exercise of Co-ordinated Market Power

Introduction

110. A business acquisition may lead to a change in market circumstances such that coordination between the remaining firms either is made more likely, or the effectiveness of pre-acquisition coordination is enhanced. Firms that would otherwise compete may attempt to co-ordinate their behaviour in order to exercise market power by restricting their joint output and raising price. In extreme cases, where all firms in the market are involved and coordination is particularly effective, they may be able to behave like a collective monopolist. Where not all firms are involved, and market share in the hands of the collaborators is reduced, co-ordinated market power becomes more difficult to exercise because of competition from the independent firms in the market.
111. In broad terms, successful coordination can be thought of as requiring two ingredients: 'collusion' and 'discipline'. Collusion involves the firms individually coming to a mutually profitable expectation or agreement over coordination; discipline requires that firms that would deviate from the understanding are detected and punished (thereby eliminating the short-term profit to be gained by the firm from deviating).
112. When assessing the scope for coordination in the market during the consideration of a business acquisition, the Commission will evaluate the likely post-acquisition structural

and behavioural characteristics of the relevant market or markets to test whether the potential for coordination would be materially enhanced by the acquisition. The intention is to assess the likelihood of certain types of behaviour occurring, and whether these would be likely to lead to a substantial lessening of competition.

Collusion and Discipline

113. In Decision 447, the Commission concluded that the proposed merger between TelstraSaturn and CLEAR Communications was unlikely to materially enhance the likelihood of co-ordinated market power in the Auckland CBD market for data access. This conclusion was based on an assessment that the market exhibited a number of characteristics which were not conducive to collusive behaviour. In particular, the Commission noted that:¹⁶

...there are several smaller network operators who could easily accommodate additional demand in the face of any raised prices. In addition, both the merged entity and Telecom are vertically integrated companies; technology is advancing rapidly; and the merged entity and Telecom have asymmetric costs. These factors all suggest that collusion will be unlikely.

114. At the time that assessment was made, UNL and Tangent were two independent network operators which may have been able to undermine any collusive behaviour resulting from the merger. Clearly that independence will be lost as a result of the current merger. However, there appear to be a number of important features that may suggest that the likelihood of successful collusive behaviour may not increase as a consequence of the current proposed acquisition.
115. First, there are considerable amounts of excess capacity in the market. The provisioning of new telecommunications networks usually involves installing surplus capacity ahead of demand, so as to avoid the expense of having to re-open trenches as existing capacity approaches full utilization. Therefore any attempt to restrict the level of service could easily be undermined by one of the market participants. Second, although there is a high degree of concentration, there is also likely to be a significant disparity in the size of the operators.
116. Further, TelstraClear and Telecom are both vertically integrated companies, and both are likely to have different cost structures from the likes of UNL and Tangent. For example, both UNL and Tangent developed their respective data networks by exploiting existing underground ducting; their network platforms are also based exclusively on fibre optic cable; and their network ‘footprints’ are geographically limited. These factors are likely to conceal any deviations from collusive behaviour and thus inhibit any disciplinary action.

Conclusion on Co-ordinated Market Power

117. The Commission has considered whether the proposed acquisition is likely to enhance the scope for successful collusive behaviour. Given the features of the Auckland CBD market referred to above, the Commission has concluded that the proposed acquisition

¹⁶ Decision 447, paragraph 191.

is unlikely to materially enhance the likelihood of co-ordinated market power being exercised in this market.

CONSTRAINTS FROM MARKET ENTRY

Barriers to Entry

118. In Decision 447, the Commission considered the nature and extent of barriers to new entry in the wholesale market for data access in the Auckland CBD. In particular, there are significant sunk costs associated with the opening of trenches into which cables are laid. For example, Decision 447 referred to research commissioned by the ACCC which found that trenching costs (which are largely irrecoverable) and cabling costs account for around 70% of the total cost of building a fixed local access network.¹⁷ As a result, the ACCC concluded that the threat of new entry is unlikely to provide much constraint on incumbent operators.
119. The Commission discussed in Decision 447 the approximate costs of installing a fixed telecommunications network within a CBD. The Commission also noted that the deployment of fixed wireless technology involves relatively low sunk costs, as no trenching is required and the assets can be relatively easily redeployed. That Decision included an examination of the likelihood, extent, and timeliness of new entry (the “*LET*” test), and concluded that potential new entry is likely to provide some constraint on the merged entity.
120. However, most parties spoken to as part of the current investigation have indicated that new entry is unlikely, on account of the level of underutilised fibre currently installed. TelstraClear suggested that if new entry was to emerge, it was more likely to be based on a wireless platform.
121. As noted earlier, CityLink currently has a limited fibre footprint in the Auckland CBD, although it does have approximately [] kilometres of ducting throughout the CBD. At the time CityLink was installing fibre in Auckland, a number of trenches had been opened up by other telecommunications companies, and CityLink was able to lay some ducting and share the trenching costs. This ducting could be used to expand CityLink’s fibre network in Auckland, []
122. []
-].
123. In light of recent discussions with key parties, the Commission now believes that new entry is unlikely in the Auckland CBD, and has therefore placed little weight on any constraint provided by the threat of new entry into this market.

¹⁷ ACCC “Declaration of local telecommunications services” (July 1999), page 49.

Conclusion on the Wholesale Market for Data Access in the Auckland CBD

124. The Commission has considered the nature and extent of the contemplated lessening of competition, in terms of the competitive constraints that would exist following the proposed merger from:

- existing competition; and
- potential new entry.

125. The Commission is satisfied that the level of competition that would remain in this market following the acquisition would be such that there is unlikely to be a substantial lessening of competition as a result of the acquisition. As noted above, the Commission has placed little weight on any constraint from potential new entry.

OVERALL CONCLUSION

84. The Commission is therefore satisfied that the proposed acquisition would not have, nor would be likely to have, the effect of substantially lessening competition in:

- the markets for the distribution of electricity in the Auckland, North Auckland and Waitakere, Eastern, and Wellington regions; and
- the wholesale data access market in the Auckland CBD.

DETERMINATION ON NOTICE OF CLEARANCE

85. Accordingly, pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance for the acquisition by VECTOR Limited or any interconnected body corporate of up to 100% of the shares in the capital of, and some or all of the assets of the business carried on by UnitedNetworks Limited.

Dated this 23rd day of August 2002

MJ Belgrave
Chair