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Commerce Commission

Decision No. 326

Determination pursuant to the Commerce Act 1986 (the Act), in the matter of an application for clearance or authorisation of a business acquisition involving:

NEW ZEALAND BUS LIMITED

and

TRANSPORTATION AUCKLAND CORPORATION LIMITED

The Commission:	Peter Allport (Chairman) Cathie Harrison Roger Taylor
Summary of Proposed Acquisition:	The proposed acquisition by New Zealand Bus Limited, or any interconnected body corporate, of either all the assets and business of, or all of the shares in, Transportation Auckland Corporation Limited.
Determination:	Pursuant to s 67(3)(a) of the Act, the Commission determines to give a clearance for the proposed acquisition.
Date of Determination:	15 May 1998

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THE ACQUISITION

1. New Zealand Bus Limited (NZ Bus) has applied, under s 67 of the Commerce Act 1986 (the Act), for authorisation or clearance to acquire either all the assets and business of Transportation Auckland Corporation Limited (TACL), or all of the shares in the company.

BACKGROUND TO THE APPLICATION

Background to the Sale of TACL

2. The Auckland Regional Services Trust (the Trust) is required to sell its shares in TACL. On 5 May 1997 the Minister of Transport instructed the Trust to divest TACL by 30 November 1998.

3. Subsequently, a Divestment Unit was established by the Trust. In September 1997 the Unit recommended that the shares of TACL be sold by competitive tender.

4. The Trust and the Divestment Unit reported to the Minister of Transport on 4 November 1997. On 24 March 1998 the Minister of Transport approved the divestment plan.

5. The sales process is underway, and the Trust expects the sale to be completed by the end of August. The sale of TACL is reported to have generated strong interest from major public transport companies in the UK, the USA and France.

Section 66 Application

6. On 12 December 1997, NZ Bus sought clearance in terms of s 66 of the Act to acquire TACL. This application was lodged in anticipation of TACL being offered for sale in 1998. The Commission was not satisfied that NZ Bus would not acquire or strengthen a dominant position in the market for the provision of scheduled bus passenger services in the greater Auckland metropolitan area if it were to acquire TACL, and declined clearance on 24 February 1998 (Decision 318).

7. On 24 March 1998, NZ Bus lodged an appeal in the High Court, under s 91 of the Act, against the Commission's decision.

THE PARTIES

New Zealand Bus Limited

8. NZ Bus is a wholly owned subsidiary of Stagecoach Holdings plc, a major UK bus and train operator. NZ Bus is the holding company for Wellington City Transport Limited and Cityline (NZ) Limited, which operate scheduled bus passenger services under the trade names Stagecoach and Cityline respectively. Stagecoach operates services in Wellington, and Cityline runs

services in the Hutt Valley and between South Auckland and Auckland City and adjacent areas.

Transportation Auckland Corporation Limited

9. TACL was established in 1991 as a local authority trading enterprise (LATE). The company is 100% owned by the Trust, a body constituted to own shares in various public assets in Auckland. TACL, the largest provider of scheduled bus passenger services in New Zealand, operates throughout the greater Auckland region primarily under the trade name, The Yellow Bus Company.

10. The major assets of TACL are a fleet of about 520 buses, 6 main depot sites, and two suburban transport centres (Otahuhu and New Lynn). In 1997 the company also acquired Whenuapai Bus Travel Limited, which operates in West Auckland under the name Whenuapai Bus Company, and Devonport Bus Company Limited, which now runs services in the Devonport area as part of the TACL operation. TACL operates a joint venture with Fullers Group Limited (Fullers Group), called the Link Partnership, which runs integrated bus and harbour ferry services between the North Shore and the central business district (CBD) of Auckland.

OTHER RELEVANT PARTIES

Other Auckland Bus and Coach Operators

11. The other main bus companies operating in the Auckland region are Howick & Eastern Buses Limited (Howick & Eastern), a family-owned company providing scheduled services between south-east Auckland and the Auckland CBD; and Birkenhead Transport Limited (Birkenhead Transport), another family-owned company which provides services in an area extending from Albany to Birkenhead, and between those areas and the Auckland CBD. In addition, some smaller companies run scheduled services on a limited basis in various parts of Auckland. These include Hanham's Buses Limited (Hanhams), Ritchies Transport Holdings Limited (Ritchies), Waiheke Bus Company Limited, Taxi North Shore Society Limited and Eastern Taxis Limited.

Tranz Rail Limited

12. Tranz Rail Limited purchased NZ Rail Limited in 1993. It provides suburban rail passenger services in Wellington and Auckland, long distance rail passenger services and road and rail freight transport services throughout New Zealand, and rail ferry services.

Fullers Group Limited

13. Fullers Group operates passenger ferry services on Auckland Harbour. It also runs passenger ferries between the Auckland CBD, and Waiheke and Great Barrier Islands, and bus services on Waiheke Island through Waiheke Bus

Company. As noted in para 10, Fullers and TACL operate the Link Partnership.

Other Transport Modes

14. Other means of transport include taxi services, and private modes of transport such as cars and motorcycles

Auckland Regional Council

15. The Auckland Regional Council (ARC) is constituted under the Local Government Act 1974. As part of the ARC's function to provide services on behalf of central government, the ARC is responsible for public passenger transport planning, and providing subsidies for passenger transport services. The ARC compiles a Regional Passenger Transport Plan, which specifies the services the ARC proposes for the region. The ARC then accepts commercial registrations for bus services, and invites tenders for subsidised services. The ARC receives 60% of its funding for the subsidised transport services from rates, and the balance from Transfund.

Transfund New Zealand

16. Transfund New Zealand (Transfund), a crown entity established by the Transit New Zealand Amendment Act 1995, is responsible for the funding of the land transport system formerly undertaken by Transit New Zealand. This involves allocating road-user funds from the National Road Account on the basis of the applications from Transit New Zealand, territorial authorities and regional councils. Transfund also has a core responsibility to approve competitive pricing procedures (CPP's), which regional councils are required to follow when conducting tenders for the supply of subsidised public passenger services.

COMMISSION PROCEDURES

17. The application, pursuant to s 67(1) of the Act, was registered on 2 April 1998. Section 67(3) requires the Commission to issue a decision within 60 working days, or such longer period as the Commission and the applicant agree to. A decision on the application is due on 30 June 1998.

18. If it is satisfied that the acquisition would not result, or would not be likely to result, in the acquisition or strengthening of a dominant position in a market, the Commission must give clearance to the acquisition under s 67(3)(a).

19. If it is not satisfied that the acquisition would not result, or would not be likely to result, in the acquisition or strengthening of a dominant position in a market, the Commission must grant an authorisation for the acquisition if it is satisfied that the acquisition would result, or would be likely to result, in such benefit to the public that it should be permitted (s 67(3)(b)). Where the benefits to the public are outweighed by the detriments, the Commission shall decline authorisation (s 67(3)(c)).

20. In investigating the acquisition, Commission staff sought comments and information from a wide range of parties. These are listed in Appendix A.

BACKGROUND TO THE MARKET

Background to the New Zealand Bus Industry

21. The industry has several large operators, and a number of smaller players. Some of the former were municipal bus undertakings, now corporatised in the form of LATE's, while others are private companies. The services provided include scheduled urban express services, school bus services, inter-urban express services and touring coach services.

22. The primary focus of this determination is scheduled urban bus passenger services which are provided for the general public. Revenues are derived from the fares charged, and from varying degrees of subsidy.

23. The operational requirements for establishing and maintaining a bus company include compliance with the Vehicle Quality Standards (VQS) imposed by subsidising authorities. A consequence is that many large operators purchase only new vehicles. A new 39-seater low-floor bus costs from $200,000 to $230,000. For contracted (subsidised) services, new vehicles and those with optional features (such as meeting defined door widths, step heights and heating), and improved accessibility (low floor, wheelchair access), are awarded a higher weighting. Bids for tendered services are determined on the basis of both price and bus quality. However, second-hand city buses are available in New Zealand, and can be imported. Imported vehicles will usually need to be refurbished and altered to comply with the VQS at an average cost of between, say, $40,000 to $50,000, depending on the vehicle's age and quality. An operator will need enough buses to service peak demand in the morning and evening "rush hours", together with a reserve of perhaps 10-15% to allow for repair and maintenance.

24. Apart from a suitable fleet, an urban bus transport operator requires depot, maintenance and washing facilities. For a larger firm, several depots may be required depending on the fleet size and the geographical spread of the routes serviced. In servicing a particular district there is a trade-off between incurring the costs of running another depot there, and the costs of running empty buses to and from that district from another depot ("dead-running costs"). For smaller firms, depot facilities need not be large or sophisticated, and maintenance can be contracted out, so an operator may only need space for parking vehicles. Because such firms operate in one district, they typically have only one depot. Establishing operations elsewhere creates the need to establish a second depot, or to incur dead-running costs.

25. The number and experience level of the staff an operator requires will depend on the size and financial position of the firm. Larger operators generally have specialised marketing, finance and depot managers, as well as staff with expert

knowledge of the industry. Many small and medium-sized bus companies are family businesses and lack the same range of specialised staff.

26. Bus services worldwide have traditionally been a "low-tech" operation, although the quality of vehicles available has steadily improved in developed countries. In the UK, buses with such features as tinted double-glazing, climate control and low noise and emission levels have been introduced in recent years. A high proportion of bus operators' costs are labour costs, and, given the industry's service nature and the fact that buses already carry only a single employee, it is difficult to increase labour productivity. The quality of the service provided is important for many passengers, and extends to the cleanliness of the vehicles, driver dress and manner, and timeliness.

27. Some sophistication is required in the organisation of route structures to tap into latent passenger demand, and in rostering buses to minimise dead-running and waiting times. Knowledge of route and passenger demand is a key advantage enjoyed by an incumbent operator, and one that it is difficult for an entrant to acquire. Some larger firms (eg TACL) employ specialised schedulers to attend to this crucial aspect of the business, and may use drivers to travel on rivals' buses to assess passenger demand on those routes.

28. While their size is disputed, it seems clear that bus operations do give rise to some supply economies of scale and of scope. Scale economies appear to arise in two major ways. First, once the decision is taken to run a service, most of the costs of the bus, driver and fuel are fixed. Additional passengers can be carried at very low marginal cost until capacity is reached, with the result that average cost per passenger falls with increasing passenger numbers. This constitutes an economy of density from maximising vehicle load factors. Secondly, all bus operations must incur certain basic costs – management, administration, depot facilities – which tend to increase less than proportionately with output. Average costs then fall with an increasing scale of operation. It has been suggested tentatively that such depot-based economies might persist up to perhaps 80 or more buses, with around 25 being a minimum viable operation. These scale economies are bolstered by the presence of economies of scope from the operation of complementary routes in a larger district network. For example, a bus which has just completed one service, rather than return to the depot empty, may be able to switch to a service on an adjacent route. Another example is the "hub and spoke" feeding of passenger traffic at suburban interchanges.

29. It has also been accepted that there are scale economies on the demand side, ie user economies of scale. This derives from the fact that the fare charged (ie the money cost) is only part of the cost of a trip. The full user cost would incorporate the travel time costs (including the walking and waiting time at each end of the trip), and service factors (including frequency, convenience, reliability and the standard of equipment). This user cost would be reduced with a more frequent service, even if the fare were to remain unchanged.

30. The public funding of urban bus (and train) passenger transport is largely directed to providing an efficient and coherent base passenger transport

network, this being justified on both economic and social grounds. Economically, the fostering of the supply of public transport, by providing a viable alternative to the private car, aims to reduce environmental ill-effects and congestion costs on roads, and to gain the user externalities mentioned above. From a social perspective, subsidisation is designed to allow all citizens, including those who would otherwise be disadvantaged by the lack of personal transport, to participate fully in community life. This is because increasing car ownership has encouraged land use patterns which make jobs and services more difficult of access for carless people.

Urban Bus Passenger Services in Auckland

31. During the late 1980's and early 1990's, there was a significant decline in patronage of local bus services in Auckland. This has been attributed to the following factors:

- an increase in real income coupled with an increase in private motor vehicle ownership;
- a decline in the relative importance of the CBD and the development of new centres of activity in suburban locations in greater Auckland; and
- an increase in real fare levels, and a reduction in service levels.

32. In 1994 patronage of bus passenger services in Auckland rose sharply, and this was followed by moderate growth in succeeding years. A partial explanation would include the following factors:

- continued population growth;
- an increase in road traffic congestion, and efforts by Transfund and the local authorities to introduce bus priority measures and dedicated bus lanes on major corridors; and
- the receptivity of the market to improvements in service quality, including the introduction of new services (eg TACL's inner-city loop service), improvements in existing services and scheduling (eg the use of smaller buses with greater frequency of service, and more direct routing), a decline in real fares, and the introduction of new buses.

33. Figures from the 1996 Census on the modes of transport used on journeys to work reveal the preponderance of private cars and the relative insignificance of public transport.

Table 1
Journey to Work Travel Mode, 1996

Mode	Number	%
Private car	246,927	50.6
Company car	59,640	12.2
Total car driver	306,567	62.8
Car passenger	26,358	5.4
Total car	332,925	68.2
Public bus	23,802	4.9
Train	2,286	0.5
Motorcycle	3,168	0.6
Bicycle	5,979	1.2
Walked/jogged	17,982	3.7
Worked at home	32,259	6.6
Other (eg. taxi, ferry)	6,021	1.2
Did not go to work	46,092	9.4
Not specified	17,817	3.7
TOTAL	488,331	100.0

Source: 1996 Census Regional Summary, Statistics New Zealand.

34. Until July 1991, public transport services were strictly regulated. Liberalisation of the industry in 1991 was designed to encourage competition, including the entry of new operators. Subsequently, Auckland has had new operators, including NZ Bus (through its acquisition of Cityline Auckland in 1992 from New Zealand Railways Corporation), MacBus (the tradename of Taranaki Coachlines Limited, a New Plymouth-based company), Hanhams and Cesta Travel Limited (Cesta) (a Dunedin-based company). However, two of these new operators (MacBus and Cesta) failed to become established and withdrew, and Hanhams has remained small.

35. TACL remains by far the largest provider of urban bus passenger services in Auckland, providing services in most districts. Other operators - NZ Bus, Howick & Eastern and Birkenhead Transport - are much smaller. These four companies together account for close to 100% of scheduled urban bus passenger services in Auckland.

36. Local bus passenger services in greater Auckland are characterised by TACL being the major operator, with very limited direct competition between it and smaller operators. Most operators confine their activities to their traditional districts within the greater Auckland region. NZ Bus appears to be the only

company which has shown any significant growth beyond its historical boundaries, but this expansion has been confined largely to the South Auckland/Central Auckland corridor (the company's traditional base), and adjacent areas.

Regulatory Environment

37. Before July 1991, operators of public transport services held an exclusive licence to operate in their respective areas. This protection was removed by the Transport Services Licensing Act 1989 (the TSL Act).

38. Notwithstanding this, local bus passenger services remain highly regulated. The industry is subject to three pieces of legislation, the provisions of which are outlined below.

Transport Services Licensing Act 1989

39. Under the TSL Act, a licence to operate bus services may be granted to any person who does not have a criminal record, or any major convictions under the Transport Act, and who can demonstrate familiarity with the relevant legal requirements.

40. The TSL Act specifies that a licence holder who proposes to operate a commercial service must register that service with the appropriate regional council. There are only very limited grounds on which a regional council can decline registration: where the service is likely to have a material adverse impact on any existing subsidised services; where the service is likely to raise the net cost to a regional council of any subsidised service; and for traffic management or environmental reasons. Notice must be given to a regional council 21 days prior to the planned commencement of the service.

41. The TSL Act stipulates that, before a regional council can provide funding for public passenger services, it must produce a Regional Passenger Transport Plan (RPTP). The RPTP, which sets out the means for implementing the Regional Land Transport Strategy (see below), specifies the routes, frequencies and hours of operation which the regional council is prepared to subsidise, where operators do not operate commercial services.

Transit New Zealand Act 1989 and the 1995 Amendment

42. The Transit New Zealand Act 1989 (the TNZ Act) established a government agency responsible for planning national passenger transport and for allocating Government funds to regional councils for subsidised passenger services. The TNZ Act also specified that funds should be allocated only to those subsidised services which have been determined by the appropriate CPP. CPP's provide the rules under which the tendering process for subsidised services are conducted. Specifically, they contain provisions relating to contract duration, process, the maximum size of a contract, and concessionary fare schemes. CPP's are designed to ensure competition for tenders, and that the lowest price is paid, subject to minimum quality and safety standards.

43. The Transit New Zealand Amendment Act 1995 established a new funding agency, Transfund, to undertake the funding role previously held by Transit New Zealand.

The Land Transport Act 1993

44. Under the Land Transport Act 1993, each regional council is required to produce a Regional Land Transport Strategy. This document identifies the land transport needs of the region, the most desirable means of responding to such needs, and an appropriate role for each transport mode in the region.

Commercial and Subsidised Services in Auckland

45. Broadly, there are two sources of funds to support passenger transport services in Auckland – subsidies and fare receipts. Subsidised (contracted) services are partly subsidised from grants from the ARC, using funds collected from local body rates, and from Transfund. The ARC contributes 60% of the subsidy, and the balance is provided by Transfund. Commercial services rely on fare receipts, although there is an element of subsidy through the Concessionary Fare Scheme.

46. A competitive tender process determines who is to operate each subsidised service. The ARC is required to invite operators to submit tenders to supply particular services which are not provided on a commercial basis. The tender documents specify among other things, the service requirements, a maximum fare schedule, concessionary fares, the length of the contracts, and minimum vehicle standards. For transport planning reasons, the ARC has divided Auckland into four major sectors (North, South, Central and West), and organises its major tendering rounds in each of those sectors on a roughly annual staggered basis.

47. There are three major types of tender: net, gross and composite. Most tenders are net tenders which would involve a tenderer calculating the cost of providing the service, including the desired profit margin, then subtracting the fare and concessionary fare revenue it expects to receive, so as to arrive at the net price as its tender. Under the gross tender, the tenderer submits its cost of providing the service. This would be paid in full by the ARC which would receive all the fare revenue. A composite tender is one which commences as a gross tender and changes to a net tender after specified patronage levels have been achieved.

48. Tenders are assessed on the basis of the bid, together with a points system based on such factors as the age and appearance of buses, the facilities provided for passengers, and the acceleration and manoeuvrability of the buses. The most important factor, however, is the level of subsidy which will be required by the operator to provide the service. In general, the lower the level of subsidy bid, the more likely is the bid to be successful.

49. To participate in the tendering process, a bidder must lodge a performance bond with the ARC. This is based on the value of the contract, with a maximum of $500,000.

50. The successful bidder must operate the subsidised service(s) in accordance with the conditions in the tender documents. Failure to comply with the terms can lead to penalties being imposed, and in extreme instances, to cancellation of the contract. The duration of contracts varies between 3 and 5 years, with staggered expiry dates. The ARC has stated in its draft RPTP that it wishes to move to 5 year terms, or up to 4 years with provision for extension to a maximum of 6 years.

51. If there is only a single bid to operate a subsidised service, the ARC can negotiate on price with the tenderer and/or re-tender the contract.

52. Commercial services can be registered at any time, on any route, and to any timetable, subject to the provisions mentioned above.

53. An operator that registers a route as commercial must rely on its own ability to attract patronage. Commercially registered services do not need to comply with the RPTP, or the associated policies, nor do the operators have any obligation to report to the ARC on the level of patronage.

54. If the ARC is dissatisfied with the commercial service provided, it can invite tenders from bus companies to operate a similar subsidised service (ie it can "contract over" an existing commercial service).

The Setting of Bus Passenger Fares

55. Fares for subsidised services are set by the ARC, but those fares also strongly influence fares on commercial rates. The Commission has been told by operators that because commercial services and subsidised services are often operated on the same routes, or sections of routes, operators would experience difficulties in differentiating fares for commercial routes. Accordingly, bus companies tend to charge a common price for each route section, regardless of whether those services are commercial or subsidised. The maximum fares for subsidised services can be varied only with the approval of the ARC. However, fares can be reduced below the maximum level, and this sometimes happens on routes where there is competition between operators.

56. The ARC's influence in relation to the setting of fares is reinforced by the ARC's Concessionary Fare Schemes, which applies to senior citizens, students, and disabled passengers. The ARC subsidises 30% of the full fare for qualifying passengers using either subsidised or commercial services, but only if the full fare does not exceed the maximum fare set by the ARC in its fare schedule, and if the passenger is charged 60% of that fare. For example, if the fare is $1.00, the passenger would pay 60 cents, the ARC up to 30 cents (being three-quarters of the discount of 40 cents), and the operator would carry the remainder of the fare. However, the ARC has told the Commission that abolition of this scheme is under discussion.

57. The Concessionary Fare Schemes are an attractive source of additional revenue for bus companies, currently providing around [ ] of gross revenue for TACL and NZ Bus, around [ ] for Howick & Eastern, and about [ ] for Birkenhead Transport.

58. Following lengthy negotiations with bus companies, the ARC allowed maximum fares to be increased by 10% in October 1997, the first increase since 1991. TACL, Howick & Eastern and Birkenhead increased their fares for subsidised and commercial services by 10%, but NZ Bus chose to maintain its existing fare levels.

THE MARKETS

Introduction

59. The purpose of defining markets is to provide a framework within which the competition implications of a business acquisition can be analysed. The relevant markets are those in which competition may be affected by the acquisition being considered. Identification of the relevant markets enables the Commission to examine whether the acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in terms of s 47(1) of the Act.

60. Section 3(1A) of the Act provides that:

> ... the term 'market' is a reference to a market in New Zealand for goods and services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them.

61. In a 1984 decision, the Commission, drawing upon the Australian Trade Practices Tribunal decision in *Queensland Co-operative Milling Association*,[1] defined a market as:

> ... a field of actual or potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive.[2]

62. Markets are defined in relation to product type, geographical extent, functional level and time. A properly defined market will include products which are regarded by buyers as being not too different ('product' dimension), and not too far away ('geographical' dimension), and are thus products to which they could switch if there were a rise in the price of the product in question. It will also include those suppliers currently in production who are likely, in the event of such a price rise, to shift promptly to offer a suitable alternative product, even though they do not do so currently.

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[1] *Queensland Co-operative Milling Association*, (1976) ATPR 40-012 at 17,247.
[2] *Edmonds Food Industries/WF Tucker & Co Limited*, Decision No. 84, 21 June 1984.

63. The Commission's *Business Acquisition Guidelines* advocates the use of a *ssnip* test to provide a framework for testing for substitutability, and hence for determining the boundaries of a market as a matter of fact and commercial common sense.[3] In regard to product market definition, the following question is posed: If the price of the product were to be raised by a hypothetical monopolist by a *ssnip* - a small yet significant non-transitory increase in price (say, five per cent) - above the competitive level for at least a year, would so many buyers switch to buying alternative products (demand-side substitutability), or would so much additional supply be added by new suppliers switching their production to the product in question (supply-side substitutability), that the price rise would not be profitable? However the Commission's normal practice is to focus on demand-side substitutability in defining a market and to incorporate supply-side substitutability in the consideration of near entry.

64. If the price rise were to be profitable because little or no such switching is considered likely, then the product as defined has no close substitutes, and it falls within a separate product market. On the other hand, if the price rise is not profitable because of widespread switching, the products to which buyers switch can be considered to be close substitutes for the initial product. These products are then added to the initial product, and the new, enlarged, product definition is subjected to the same test. This process continues until no significant switching occurs in response to the increased price. The boundaries of the product market so arrived at should occupy the smallest range of products consistent with a hypothetical monopolist being able to exert market power, as defined by the *ssnip* test.

65. The *ssnip* test is also used to gauge the geographical extent of the market. The process starts by taking one small district or region as appropriate, and considering whether a hypothetical monopolist of the product in that area, if it were to impose a *ssnip* as defined above, would lose so many customers to suppliers of the product outside the designated area, that the price increase would be unprofitable. An absence of switching would indicate that suppliers outside that area cannot provide substitute products, in which case the area initially specified would constitute a separate geographical market for the product. On the other hand, the presence of widespread switching would show that suppliers in other areas could provide products which were effective substitutes and, therefore, that the geographical extent of the market was broader than the area initially specified. The test would then be repeated with the broader geographical area, and this process would continue until significant switching outside of that area in response to the price rise ceases. Once again, the geographical market for a product is the smallest geographical space in which a hypothetical monopolist could exert market power.

66. In practice, the process of defining markets is unlikely to be as precise and as scientific as suggested by the *ssnip* test. However, in the Commission's view, the *ssnip* approach provides a useful framework for assessing the question of what other products, or products from other areas, are substitutable for the

3 Commerce Commission, *Business Acquisition Guidelines*, 1996, pp. 14-15.

product in the area in question as a matter of fact and commercial common sense. The test simply provides a means by which judgements on a case-by-case basis, using whatever information happens to be available or can readily be generated, can be made. The issue remains one of substitutability in response to a price increase, and so evidence relating to the price elasticity of demand, the behaviour of buyers, the availability of technically suitable alternative products, transport and distribution costs, informed opinion from various sources, and overseas studies, will all be of assistance. This has been the approach used with regard to the present application.

67. The *ssnip* test is normally employed in markets where the price received by the supplier of the product in question is the same as the price paid by the buyer. Then the hypothetical 5% price increase affects both sides of the market equally. However, passenger transport services are different from most other products in that they are not normally valued in themselves; rather, their usefulness is more closely related to the value of the activity undertaken at the destination end of the journey. Hence the journey itself may be regarded as imposing a cost on attaining that valued objective. That cost comprises not only fare expense, but also the opportunity cost of the traveller's time. As mentioned earlier, the sum of these costs is called the traveller's "user costs" of the journey. Once the notion of user cost is accepted, the issue is raised as to whether it is the user cost, or (in the case of bus trips) the fare, which ought to be used as the basis for conducting the *ssnip* test.

68. Clearly, the choice could make a large difference to the outcome of the test where, for example, the fare is \$2, but the user cost of the trip is, say, \$8.[4] A *ssnip* of 5% on the fare is only 10 cents, but if the "price" were considered to be the user cost, the 5% increase would amount to 40 cents. Since the latter would have to be applied to the fare by the hypothetical monopolist, it would be equivalent to an increase on the fare of 20%. More bus passengers would shift to other modes of transport in the latter case, increasing the likelihood that a market wider than scheduled bus passenger transport would be appropriate.

69. However, further analysis of the example just cited shows that it would not be appropriate to base the *ssnip* test on the user cost. In competition policy the exercise of defining the market is considered not to be an end in itself, but rather is intended to cast light on whether behaviour by market participants has breached the Act. In dominance analysis it is the first step in determining whether a particular firm has market power. Market power is to have a "high degree of market control."[5] Hence in the case where there is an apparent divergence between the "price" to the user, and the fare charged by the supplier, the focus on the potential for market power to emerge on the supplier's side of the market dictates that that is where the *ssnip* test should be focused. If a hypothetical monopolist can profitably raise bus fares by at least 5% for at least a year, the adverse welfare effects flowing from that are likely

4 Assuming a total trip time of 30 minutes, and valuing the traveller's time at \$12 per hour based on the Transfund Project Evaluation Manual.

5 McGechan J, in *Commerce Commission v Port Nelson* (1995) 5 NZBLC 103762.

to be much the same as those in otherwise similar markets where there are no user costs. To apply a different standard for bus markets would lead to an inconsistency in the Commission's approach to market definition and to market power analysis.

70. This view is supported by the fact that the choice of the 5% figure for the *ssnip* test is somewhat arbitrary, being keyed to avoiding significant adverse welfare effects flowing from the exercise of market power in markets of "average" size. In markets of above-average size it has been suggested that a smaller percentage should be used to avoid the absolutely larger welfare loses from market power which would otherwise ensue.

71. Markets are also defined in relation to functional level. Typically, the production, distribution, and sale of products proceeds through a series of functional levels. For example, in the case of goods, that between manufacturers and wholesalers might be called the "manufacturing market", while that between wholesalers and retailers is usually known as the "wholesaling market".

72. The Commission's *Business Acquisitions Guidelines*[6] also states that where a market exhibits distinct differences in competitive situation at different time periods, it may be appropriate to expand the market definition to include a time element. For example, different markets may be defined for peak and off-peak time periods.

Markets Relevant to the Acquisition

73. In Decision 318, the Commission identified the following markets as being relevant for the purpose of analysing the acquisition:

- the provision of scheduled bus passenger services in the greater Auckland metropolitan region;
- the provision of school bus services in the greater Auckland metropolitan region; and
- the provision of bus charter services in the greater Auckland metropolitan region.

74. Previous analysis in Decision 318 found that the proposed acquisition would not raise dominance concerns in the latter two markets. In the present investigation the Commission has not received any further information which changes that view. Consequently, from this point the focus will be exclusively on the provision of scheduled bus passenger services in the greater Auckland metropolitan region.

75. The Commission has found only limited empirical data showing the extent to which the Auckland travelling public is likely to switch between the various

6 *Op cit.* p14.

modes of transport in response to relative price movements, or to changes in the quality of services. However, the Commission considers that the limited information which is available provides a reasonable indication of the likely impact of the application of the *ssnip* test. The information used is discussed below under four headings: ARC surveys; impact of the bus fare increase in October 1997; overseas studies of price elasticity; and inter-modal transport substitutability.

ARC Surveys

76. The Commission has obtained some material from surveys conducted by the ARC, which are attached as Appendices B and C. This analysis is summarised below.

77. The Home Interview Survey (HIS) was carried out in 1992 as part of a joint survey undertaken by the ARC, Transit New Zealand and the Auckland Territorial Local Authorities. A representative, stratified sample of almost 10,000 households was asked by telephone survey about all the trips they had made on the previous day. The survey found that 79.7% of all trips were made either as the driver, or as a passenger, in a car. Another 10.6% of trips were by bicycle or on foot, and a further 6.5% were by public transport.

78. From the questions asked, the ARC was able to divide the trips made by respondents into two categories: “choice” trips, in which a car was used to make that particular trip; and “captive” trips, for which respondents had to use public transport because of lack of access to a car. It was found that 91.3% of public transport trips in Auckland were “captive”.

79. Although the responses were very short term in nature, they do suggest that if a *ssnip* were applied to public transport fares, the number of such trips would be unlikely to decline, since public transport users would have no substitutes to which they could turn. This in turn would imply that the price elasticity of demand for public transport is low, which overseas and local studies suggest is the case (see below).

80. In a separate survey which was carried out by the ARC in 1992 into the attitudes of car drivers to public transport, it was found that car drivers were insensitive to a range of policy measures designed to encourage them to switch to public transport. None of the measures had much impact individually on the preference for car transport.

81. Consequently, a combination of these policy measures was put to the sample of car drivers as follows:

- fuel costs increased by 100%;
- parking costs increased by 100%;
- car travelling time increased by 25%; and
- public transport fares reduced by 30%.

82. This combination of policies was found to change the stated preferred means of travel for only 4.3% of car drivers, further suggesting that the price elasticity of demand for public transport is very inelastic in response to a fall in fares (a fall being the opposite of the movement required in the *ssnip* test).

83. In summary, the Commission considers that while the two ARC surveys are not conclusive, they are indicative of a lack of substitutability between transport modes, especially cars and buses, and that this supports a narrow product market definition.

Impact of the Bus Fare Increase in October 1997

84. As noted above, TACL, Howick & Eastern and Birkenhead Transport raised their fares by around 10% in October 1997, this being the first increase since 1991. The Commission understands that fares for suburban train services and harbour ferries remained unchanged. While the price increase is larger than that which applies in the *ssnip* test, and it is not possible to hold other determinants of demand constant, it does provide an opportunity to assess the actual market response.

85. The indications from major bus operators are that the increase resulted in no substantial decline in bus passenger numbers. For instance, TACL commented there had been no overall discernible reduction in patronage since the increase was imposed, although it notes that other factors had affected patronage over the period (eg people taking a longer vacation over the January period, and school and tertiary institution holidays). Birkenhead Transport reported that following implementation of the price increase, there was a relatively small decline in passenger numbers, followed more recently by a recovery towards levels applying prior to the increase. The Commission has conducted its own investigation using passenger data from bus operators and Tranz Rail, and this appears to support the views of the operators.

86. The Commission considers that, despite the limitations outlined above, the evidence from the October fare increases is broadly suitable for assessing the response to the application of a *ssnip*. That evidence suggests that a fare increase substantially in excess of 5% would be necessary before any significant switching from buses to alternative modes would take place, supporting the view that there is a separate bus market.

Overseas Studies of Price Elasticity

87. The Commission has reviewed surveys which summarised the results of many studies of public transport demand elasticity carried out overseas. Virtually all show that the price elasticity of demand for local bus services or public transport is very inelastic: the measured values are typically well below minus one. Such inelasticity (or lack of price responsiveness) in a demand curve is likely to arise when the product in question has few, if any, close substitutes. This in turn implies that that product is sufficiently differentiated from other products to constitute a separate market.

88. A widely quoted international study, involving transportation research workers in nine participating OECD countries, was published by the UK's Transport and Road Research Laboratory (the TRRL study) in 1980.[7] This summarises the results of 103 measurements of fares elasticities in the nine countries in a table, probably mainly for the 1960s and 70s, which is reproduced as Table 2 below.[8] The results appear to show relatively little variation between the different countries, with most having a mean price elasticity of demand of close to –0.3, which is the average for all of the studies combined. Elsewhere, the report suggests that the most likely range of values would be –0.1 to –0.6.[9]

Table 2
Mean Fares Elasticities for Different Countries

Country	Mean and standard deviation*	Number of measurements
Australia	-0.37±0.06	14
United Kingdom	-0.33±0.03	39
United States	-0.23±0.03	31
W. Germany	-0.34±0.04	13
Other countries	-0.31±0.07	6
Total	-0.30±0.02	103

*Note: the standard deviations are those on the mean elasticity values, which are calculated by giving equal weight to each individual value reported. No attempt was made to assess the reliability of the estimates.

89. Cross-price elasticities have a more direct bearing upon the degree of substitutability between different products, but they are much less frequently calculated and the estimates are more variable, possibly reflecting alternative estimation procedures and time-lag factors. The TRRL study reproduces the results of what appears to be a USA survey.[10] It found that for six cities the cross-price elasticity of the demand for bus services with respect to the price of car travel had a mean value of 0.62, with a standard deviation of 0.20. On the other hand, the demand for car use with respect to the price of bus services (including one rail service) had a mean value of 0.16, with a standard deviation of 0.09. These rather limited results suggested that the demand for bus travel was more sensitive to the price of car travel than was the demand for car use in relation to the price of bus services.

90. In an assessment of cross price elasticity studies in Greater London, Button, in his textbook on transport economics, suggests that there is more likely to be switching between alternative public transport modes in response to relative

7 *The Demand for Public Transport: Report of the International Collaborative Study of the Factors Affecting Public Transport Patronage*, Crowthorne, UK: TRRL, 1980. The participating countries were: Australia, Canada, France, Netherlands, New Zealand, Sweden, West Germany, United Kingdom and USA.

8 *Ibid.*, Table 7.1, p. 109.

9 *Ibid.*, Figure 1, p. xviii.

10 *Ibid.*, pp. 270-71.

price changes, than between public and private transport. He comments as follows:[11]

> One of the more interesting points is the almost total insensitivity of the demand for urban car use to the fare levels of both bus and rail public transport modes. This fact, which has been observed in virtually all studies of urban public transport, is the main reason that attempts by city transport authorities to reduce or contain car travel by subsidising public transport fares have, in the main, proved unsuccessful.

91. While it has been put to the Commission that cars and buses must be part of the same market because bus companies and regulatory authorities spend much time and funds trying to persuade car drivers to take the bus, this appears to be based on the notion that cars and buses are *technical* substitutes (ie they are alternative ways of meeting transport needs in the abstract). However, the available evidence suggests rather strongly that in the aggregate perspective the two are not *economic* substitutes, which is the criterion used in defining markets.

92. Moreover, while counselling caution, Button suggests that the long-term trends for increasing car ownership and use, and reducing demand for public transport, seem to reflect the impact of rising income levels through the respective income elasticities of demand for those two transport modes. Again, the apparent substitutability between cars and buses is not related to the short-term price sensitivities used in the *ssnip* test.[12]

93. Two more recent surveys published in 1992 of the literature from the late 1970s to the early 1990s are by Goodwin and by Oum, Waters and Yong, the former covering mainly European material and the latter mainly North American.[13] The former includes 21 studies which specifically estimated bus fare elasticities. A total of 50 bus fare elasticities are quoted, and these have an unweighted average value of -0.41. However, for elasticities estimated using annual data (which is the focus most relevant for the *ssnip* test), the average elasticity was about -0.37.

94. Moreover, Goodwin's survey suggests that the cross elasticity of car ownership with respect to public transport fares is probably less than +0.1, implying a relatively low degree of substitutability between the two modes, although he adds that combined with the somewhat higher long-run price elasticities of more recent studies, it may be that modal shifts are more feasible than is often assumed.

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11 Kenneth J. Button, *Transport Economics* (2nd edition), Aldershot, UK: Edward Elgar, 1993, pp. 47.

12 *Ibid.*, pp. 7 and 45.

13 P. B. Goodwin, "A Review of New Demand Elasticities with Special Reference to Short and Long Run Effects of Price Changes", *Journal of Transport Economics and Policy*, vol. 26(2), 1992, pp. 155-69; and T. H. Oum, W. G. Waters II and J-S Yong, "Concepts of Price Elasticities of Transport Demand and Recent Empirical Estimates", *Journal of Transport Economics and Policy*, vol. 26(2), 1992, pp. 139-54.

95. The survey by Oum, Waters and Yong reported on the price elasticity estimates from 12 studies of the demand for "urban transit" (which is not defined). They did not attempt to produce an average figure like Goodwin, but instead cited the range within which the results fell: this was from –0.01 to –0.78, with "most of the values falling between –0.1 to –0.6." They concluded that "(t)hese recent figures indicate that the demand for urban transit continues to be rather inelastic."

96. It is important to recognise the limitations which attach to elasticity estimates. These include the need to take into account the specific contexts of the studies; the data and methodologies used; the distinction between short-run and long-run time frames; and the likely presence of segments within the overall market distinguished by journey purpose, characteristics of patrons, time of day, method of payment (eg travel card) and the like. Nonetheless, even with these reservations, the results of the overseas studies over a wide range of countries, cities, times, dates, and study data and methodologies are impressive in their consistency. They suggest that there are no close substitutes for local bus transport, implying that there is a distinct market for local bus services.

97. It seems reasonable to suggest that the overseas results are likely to be indicative of what might be found in New Zealand. Indeed, the TRRL study cited above includes a reference to an Auckland study dated 1970 which found a fares elasticity of –0.3.[14] A more recent study by Travers Morgan (NZ) Ltd examined the determinants of demand for municipal bus services in seven urban centres using data for the period 1974/75 to 1988/89.[15] With two alternative models, the real fare elasticity of demand averaged across all centres was -0.34 and –0.32 respectively. The individual results for most of the centres varied little about the mean for both models. The results for Auckland proved unexpected, with positive values in both cases. It also quotes several other earlier New Zealand bus studies, one of which gives a fares elasticity for Auckland buses of –0.24.[16] These low elasticities are reinforced by the evidence on the impact of the bus fare increase in Auckland discussed above.

Inter-Modal Transport Substitutability

98. The Commission has also examined the extent to which scheduled bus passenger services compete with other forms of transport in Auckland. It must be recognised that competition may be prevalent on some routes and not others, particularly in the case of rail and ferry services. The distinction between technical substitutability and economic substitutability, and the fact that market definition relates only to the latter, has to be emphasised. The following is a summary of the findings.

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14 *The Demand for Public Transport., op. cit.*, p. 268.

15 *Urban Bus Study Stage 3: Analysis of Public Transport Patronage Trends*, Travers Morgan, 1990 pp.6-7. The seven centres were Auckland, Wellington, Christchurch, Dunedin, Invercargill, Timaru and New Plymouth.

16 *Ibid*, p.20.

Private Motor Vehicles

99. Private motor vehicles are the predominant form of transport in Auckland, with nearly 70% of people in Auckland using motor vehicles as their primary means of transport to work.[17] On the basis of comments received from the applicant (and certain other parties), it appears that the availability of second-hand cars imported from Japan has led to a decrease in the cost of car ownership, and that this in turn has increased the affordability of cars for a wide cross-section of the public. From this sort of information the applicant inferred that motor vehicles provide a high degree of substitutability for local bus passenger services as well as for other forms of public transport.

100. In a submission prepared for the applicant, Mr Michael Copeland of Brown, Copeland & Co Ltd notes the importance of the distinction between average and marginal costs of passenger transport services. For a person who already owns a car, the marginal cost of using it is less than the costs to a non-car owner of acquiring and using a car. Nonetheless, even the marginal costs of fuel, repairs and maintenance, parking and time delays from congestion are substantial, and in most cases are likely to greatly exceed the fare on public transport.

101. Also, there are major differences in terms of price, availability and convenience between users. For those user groups who do not own, or have access to, a car - most notably children, senior citizens, and those in lower income households - local bus passenger services often represent the only available mode of transport. Moreover, even if cars were a substitute for bus travel, the time period needed for bus users to switch to car use in response to a *ssnip* might well exceed the 12 month period because of the costs of acquiring a substantial asset like a car, and possibly the need to undertake driver training. It has also been found that the travel behaviour of individuals reflects their activity patterns, and the interlocking of activities between household members. The organisation of these activities offers much flexibility to adapt to outside transport changes, but also, once transport arrangements are determined adds considerable inertia.

102. Evidence suggests that car drivers are extremely reluctant to switch from cars to buses, regardless of the quantum of a fare increase or decrease. This is supported by the ARC survey results. Conversely, it has been suggested that an illustration of the substitutability between cars and buses is provided by TACL's inner city loop service which, during the first 12 months of operation, carried in excess of 1.5 million passengers. Research showed that two-thirds of these passengers had previously used an alternative mode of transport, including cars, taxis and walking. However, the Commission believes that this service shows the presence of a latent demand for a new service and, as such, does not shed light on substitutability.

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17 *1996 Census of Population and Dwellings, Regional Summary*, Statistics New Zealand.

103. Having regard to the above factors, the Commission's view is that private motor vehicles only represent a limited substitute for bus services. In the long run, it may be possible for some travellers who are dependent on bus services to make alternative arrangements, including saving to purchase a vehicle or entering a car-pooling arrangement. However, most users will continue to be reliant on buses.

Taxi Services

104. The Commission was told previously by some parties that travellers are likely to substitute taxis over short distances (eg to travel to or from the local supermarket), or at certain times for personal security reasons, or when local bus services are less frequent. However, taxi fares are considerably more expensive than bus fares, and while the differential decreases when several people travel together to one or more locations, the Commission does not consider that this is sufficient to make them a practical substitute for most bus users.

Suburban Rail Services

105. The Commission has found that suburban rail services in Auckland may represent an alternative for a proportion of those travelling within the corridor extending from South Auckland to central city, and to a lesser extent, from Waitakere (West Auckland) to central Auckland. However, it is important to note that even in those corridors, rail routes do not necessarily correspond with bus routes. On some bus services, such as those operated along the Great South Road, and along some parts of the western rail corridor, there may be some scope for some passengers to substitute between bus and rail. In the South Auckland corridor, there are up to 2.7 million passengers who may have a choice between buses and rail. While this represents a very small proportion of the 32 million bus passenger journeys in Auckland, it is possible that the competition which might exist in the South Auckland corridor could influence fares in some adjoining South Auckland localities.

106. While rail services provide a degree of choice, at similar price levels, the lack of a sufficient rail network means that there is no choice between rail and bus for most journeys. For this reason, the Commission's view is that suburban rail services do not represent an effective substitute for bus services in most of the greater Auckland metropolitan region.

Ferry Services

107. Passenger ferry services provide an alternative for those travelling between Birkenhead, Devonport and Bayswater on the North Shore and the Auckland CBD. However, it is unlikely that ferries would provide an adequate substitute for buses for many of those travelling between the North Shore and central Auckland due to scheduling, and the additional time required to undertake a journey using either a combination of the two modes or using the modes separately.

Other Modes of Transport

108. The Commission has found that walking and bicycling represent alternatives to buses over relatively short distances. For instance, those travelling between Auckland city and, say, Ponsonby, may choose to walk as a substitute for TACL's inner-city loop service. However, the Commission considers that in the main, walking and bicycling and similar modes of transport do not constitute a substitute for bus passenger services over the distances which such passengers normally travel.

Views of the Applicant on Market Definition

109. In its notice, NZ Bus maintains its previous stance on market definition, submitting that the relevant market is that for the provision of personal transport services in the greater metropolitan Auckland area. It considers that from the demand-side perspective, the travelling public in Auckland has a choice between buses and various competing modes of transport, including private motor vehicles, trains, taxis, ferries, walking and cycling. Also, that "bus service users do have alternatives and are not captive in any real sense" (emphasis in original).

110. In support of the above claims, the applicant drew on two reports prepared on its behalf for the previous application, by Mr Ian Wallis, Booz-Allen & Hamilton (NZ) Limited, and Mr Copeland. The applicant's views on market definition were also supported by some parties approached by the Commission during the investigation of the acquisition (eg Ministry of Transport and the Auckland City Council).

111. Mr Wallis stated that, in response to ARC papers relating to the "captivity" of users, public transport services (including urban buses) are not captive in the usual sense, but are relatively responsive to changes in fares and service levels. He contended that this is supported by a survey which was carried out in Tauranga in 1986 to assess the impact of the withdrawal of bus services. The survey results showed that when bus services were withdrawn, previous bus users continued to make the same trips, with a substantial proportion being made by motor vehicle. Specifically, 79% of respondents continued to travel to the same places, and at the same frequency, as when the bus service was operating.

112. However, the Commission does not accept that the Tauranga survey provides an appropriate framework for testing economic substitutability because it involved the withdrawal of most bus services rather than a fare increase as required by the *ssnip* test. Moreover, Tauranga is unlikely to be representative of what might have occurred in Auckland, a much larger centre in terms of population and geographic spread. The survey revealed that a significant number of former bus users suffered some degree of inconvenience or hardship as a result of the withdrawal of bus services.

113. The applicant also makes reference to an extract from a survey conducted in Christchurch on behalf of the Canterbury Regional Council. This showed that

only 12% of patrons considered that they had no alternative to travelling by bus. Further, it was found that 55% indicated that they would get to their destination by car if they could not travel by bus. Another 11% would walk, 14% would travel by bicycle, 6% by taxi and 1% by motorcycle.

114. The Commission's view is that these findings are not necessarily indicative of the response from the imposition of a *ssnip*. Rather they appear to be related to the issue of technical substitutability between various modes. For these reasons, the Commission does not accept them as a valid test of economic substitutability.

115. Mr Wallis stated that there is a substantial degree of switching between bus and car in response to bus fare and service changes, although the quantum is difficult to measure, and will vary between cities and situations. To support this claim, Mr Wallis drew on empirical data from the United Kingdom, without elaboration. He also noted that the ARC survey results show that patronage is moderately responsive to changes in fare and service levels in the short run, and is substantially more elastic in the longer run. Further, he claimed that the evidence indicates that historically, bus passengers have been able to find alternatives to bus services in both the short and long term.

116. On the basis of the limited available information, the Commission does not accept that there is likely to be a significant degree of switching between buses and cars in response to changes in relative price movements. This is supported by the results from the ARC surveys, the results of virtually all overseas and local surveys on price elasticities which have been discussed above, and the anecdotal evidence and other evidence on the effects of the fare increase introduced in Auckland towards the end of last year.

117. The Commission notes that while the demand for public passenger transport services is somewhat more elastic in the long run, most surveys show that it is very inelastic in the short run. However, the Commission is of the view that an application of the *ssnip* test would not lead to any significant switching away from bus services within the permitted 12-month period.

118. Mr Copeland concurred with a broad market definition on the grounds that the use of user costs narrows the difference in cost between the modes of transport: that car travel is the most important substitute for bus passenger services; and that a single UK cross-price elasticity estimate suggested a high level of substitutability between bus and car travel.

119. However, as pointed out earlier, the Commission believes it is not appropriate to conduct the *ssnip* test on the basis of user cost. Further, in relation to Mr Copeland's comments in respect of price elasticity estimates, the figure which he referred to is from one source only and is not consistent with the findings from the wide range of surveys reviewed by the Commission.

Conclusion on Applicant's Views on Market Definition

120. In summary, the Commission does not accept that the approach which has been adopted by the applicant provides the correct test for delineating the relevant product market. Rather, the Commission believes that the appropriate framework in which to analyse market definition issues is in terms of a response to a change in relative prices of the good or service in question and possible substitute goods or services. This approach is embodied in the *ssnip* test, which is used for anti-trust purposes by the Department of Justice and the Federal Trade Commission in the USA, and has recently been introduced into European Union competition procedures. The *ssnip* test provides a consistent and appropriate framework for analysing economic substitutability.

C*onclusion on Relevant Product Market*

121. While there is an element of substitutability between the various forms of transport outlined above, an application of the *ssnip* test, which is the appropriate framework for assessing market definition, leads the Commission to conclude that the relevant product market is that for scheduled bus passenger services.

Function Markets

122. In relation to scheduled bus passenger services, the applicant has suggested that the bus industry is characterised by two distinct classes of acquirers in Auckland: the users of bus services on the one hand, and the ARC, which acquires subsidised services, on the other. The applicant considers that the actions of the two are inter-related, and that both impact on competition.

123. The Commission accepts this distinction, albeit in a modified form. It prefers to characterise the ARC as performing the role of buyer of tendered bus services on both a commercial and subsidised basis on specified routes in the geographic market to be identified below. In other words, there is a separate "tendering" market in which bus operators acquire the rights to provide bus services on particular routes. Operators tender for a subsidised service by offering a bid, which is the amount of subsidy they require to run the specified service. Commercial registrations can be incorporated into this market by viewing commercial routes as being tendered for at a zero price. As an input in the provision of downstream scheduled bus passenger services, these rights are as important as the buses themselves.

124. It is through this tendering market that the various routes and services are allocated to operators on a competitive basis, although the amount of competition will depend upon the number and composition of actual and prospective operators in the scheduled bus passenger market. Consequently, these two markets will be closely related. For example, the emergence of a dominant bus operator in Auckland would be expected to impact both on the amount of competition, and the outcome of bidding, in the tendering market, as well as on the nature of the subsequent competition in the downstream scheduled bus passenger market.

Conclusion on Relevant Functional Markets

125. The Commission concludes that there are two relevant functional levels of the market:

- the scheduled bus passenger services market; and

- the market for the rights to operate commercial and subsidised scheduled bus passenger services.

Geographic Market

126. Typically, the provision of bus passenger services involves the carriage of passengers over a multiplicity of routes which, for the most part, are unlikely to be regarded by bus passengers as being substitutable one for another. Indeed, many passengers may be interested in travelling only on certain segments of particular routes. From the demand perspective, it could be argued that each of these routes constitutes a separate market. In this context the application of the *ssnip* test suggests that passengers on one route would be unlikely to switch to a route in another district because they would not be considered to be close substitutes.

127. The Commission's view is that each route displays broadly similar demand and supply characteristics, and bus operators typically supply a number of different routes. To avoid having to analyse a large number of route markets, many possibly difficult to define, the Commission proposes to group them into one composite market covering the greater Auckland metropolitan area. Subject to this qualification, the Commission is of the view that the geographic market can be viewed as a discrete market for the purpose of investigating the competition implications of the acquisition. This corresponds in broad terms with the area administered by the ARC. Attached as Appendix D is a map showing the geographic boundaries of the market.

Time Dimensions

128. It would appear that the degree to which bus passenger services are substitutable for alternative forms of transport can be influenced by temporal factors. For instance, people who travel to and from work by bus in the peak morning and afternoon/evening periods may, in off-peak times such as evenings and weekends, substitute private motor vehicles, or other forms of transport. This view is supported by the survey material from Goodwin who suggests that off-peak elasticities are typically about twice those in the peak periods (indicating that bus passengers are less insensitive to price changes in the off-peak). Nonetheless, even in off-peak periods the demand for bus services remains inelastic.

129. Given this finding, and that the distinction between peak and off-peak periods is a relatively fluid concept, the Commission's view is that it is not necessary to distinguish separate markets for off-peak and peak periods.

Conclusion on Markets

130. The Commission concludes that the relevant markets are those for:

- the provision of scheduled bus passenger services in the greater Auckland metropolitan region; and
- the rights to operate commercial and subsidised scheduled bus passenger services in the greater Auckland metropolitan region.

DOMINANCE

131. In terms of s 67 of the Act, the Commission is required to consider whether or not implementation of a proposed acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in a market.

132. Section 3(9) of the Act states that a person is in a "dominant position" in a market if:

> ...that person as a supplier or an acquirer...of goods and services, is...in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in that market and for the purposes of determining whether a person is...in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in a market regard shall be had to –
>
> (a) The share of the market, the technical knowledge, the access to materials or capital of that person...:
>
> (b) The extent to which that person is constrained by the conduct of competitors or potential competitors in that market:
>
> (c) The extent to which that person is constrained by the conduct of suppliers or acquirers of goods or services in that market.

133. In reaching a view on whether a person is in a position to exercise a dominant influence in a market, the Commission considers the foregoing non-exhaustive factors and any other matters that may be relevant in a particular case. Important factors in the present case include the constraints from existing competition, potential competition, the countervailing power of the ARC, and the constraint posed by alternative modes of transport.

134. McGechan J in *Commerce Commission v Port Nelson* (1995) 5 NZBLC 103,762 stated:

> ... ("dominance") involves more than "high" market power; more than mere ability to behave "largely" independently of competitors; and more than power to effect "appreciable" changes in terms of trading. It involves a high degree of market *control*. (emphasis in original)

135. The judge noted that absolute control was not necessary. There need not be a monopoly for there to be dominance, nor the ability to act totally without

regard to competitors, suppliers, or customers. Nor must any competition be so slight as to be of no consequence. Nevertheless, to be dominant, he said that a firm must be able to act, within the limits of commercial reality, without significant competitive or consumer constraints. On appeal the Court of Appeal did not dispute this approach to defining dominance.

136. Dominance will be assessed under the following headings: market shares; constraint by existing competitors in the bus services market, constraint on existing operators from competition in the tendering market, conditions of entry/expansion, constraint by potential competition, constraints from alternative modes of transport and constraint by the ARC.

Market Shares

137. TACL is by far the largest urban bus operator in the greater Auckland region, providing an extensive range of scheduled commercial and subsidised services in many parts of the region. NZ Bus, the second largest operator, also operates a mixture of commercial and subsidised services, but these are confined largely to a corridor extending from South Auckland to the Auckland CBD, and areas adjacent to this corridor.

138. The balance of bus services in the greater Auckland metropolitan region is provided by various companies, including:

- Howick & Eastern, which services certain routes between Howick, Pakuranga, other parts of south-east Auckland and the Auckland CBD;
- Birkenhead Transport, which operates services in Birkenhead, Glenfield, and surrounding areas of Auckland’s North Shore, and between those suburbs and the Auckland CBD;
- Hanhams, which operates a few services on the North Shore; and
- Ritchies, which operates a few services in West Auckland.

139. In addition, there is a number of other smaller operators, including bus and taxi firms, which provide bus passenger services, predominantly at off-peak times, or on routes which generate only sufficient passenger traffic to warrant the use of mini-buses.

140. All of the companies mentioned above operate commercial and/or subsidised routes which they have gained access to via the tendering market. The coach operators, Pavlovich, Cesta, MacBus, and various taxi companies have sought access to routes through the tendering market in the past but currently do not operate in the scheduled passenger bus market.

141. The ARC has provided the Commission with data on a confidential basis showing the estimated patronage of local bus services in the geographic market. This is based on returns from bus companies on the number of passenger boardings on subsidised routes, and the ARC's estimate of the number of passenger boardings on commercially registered routes.

142. On the basis of ARC data, market shares are estimated in Table 3. These indicate that the merged entity would have a market share of [ ] on the basis of passenger boardings.

Table 3
Market Shares: Market Shares Based on Approximate Number of Passenger Boardings for the Year Ending 30 December 1997

Company	**Millions of Passenger Boardings**	**%**
TACL	[ ]	[ ]
NZ Bus	[ ]	[ ]
Combined NZ Bus/TACL	[ ]	[ ]
Howick & Eastern	[ ]	[ ]
Birkenhead Transport	[ ]	[ ]
Others	[ ]	[ ]
Total	[ ]	100.0

143. The major drawback with the above method for calculating market shares is that it does not take into account the length of the journey travelled by bus passengers. To address this problem, the Commission has calculated market shares on the basis of fare revenue. These alternative estimates are shown in Table 4.

Table 4
Approximate Market Shares 1997-98 Based on Revenue

Company	$ million	% Approx
TACL	[ ]	[ ]
NZ Bus	[ ]	[ ]
Combined NZ Bus/TACL	[ ]	[ ]
Howick and Eastern	[ ]	[ ]
Birkenhead Transport	[ ]	[ ]
Others	[ ]	[ ]
Total	[ ]	100.0

Notes:
1. The figures for TACL are for the year ending 31 March 1998.
2. The figures for NZ Bus are based on actual revenue for the 6 months ending 31 March 1998, doubled to produce an approximate annual figure.
3. The figures for Howick & Eastern are for the year ending 31 March 1998.
4. The figures for Birkenhead Transport are for the year ending 31 October 1997.
5. The figure for ‘Others’ is based on revenue data compiled by the ARC for the year ending 31 December 1997.

144. On the basis of revenue data, the merged entity would have a similar market share to that based on passenger boardings.

Conclusion on Market Shares

145. On the basis of the above market share calculations the combined entity would, in the Commission’s estimation, account for between 85% and 90% of total scheduled bus passenger services in the market. The two next largest operators (Howick & Eastern and Birkenhead Transport) would hold relatively small shares of around [ ] each.

146. Actual shares in particular localised markets will vary depending on the routes concerned. On most routes the incumbent is the only operator, with 100% market share. These routes would have been acquired by bidding in the tendering market, often in competition with other bus operators.

Constraint by Existing Competitors in the Bus Services Market

147. Historically, bus companies in the market have confined operations to their own districts and competed only at the fringe. Indeed, the market is characterised by very limited head-to-head competition with most bus companies operating as monopolists on individual routes, or segments of routes. Competition is confined to a limited number of routes where the services of rival companies overlap. Examples include the Great South Road, Bayswater (North Shore) and the Mt Wellington/Panmure Highway.

148. TACL has traditionally been by far the largest operator, and while its market share has reduced a little in recent years, it still accounts for around three quarters of the total market in the greater Auckland metropolitan region. The company provides bus passenger services throughout most of this region using six main depot sites.

149. NZ Bus is the next largest operator in the greater Auckland region, although its market share is significantly below that of TACL and its geographic area of operation is much more limited. The company has doubled its size since its acquisition of Cityline in 1992, although this growth has been confined to areas bordering its traditional geographic district. Nonetheless, it remains much smaller than TACL, with a market share of [ ].

150. All other operators are small and mainly family-owned single-depot operations. Virtually all of these firms have shown a reluctance to expand beyond their geographic areas. Howick & Eastern, for example, provides bus passenger services from its base in South-East Auckland, and it has shown no interest in expanding substantially beyond its immediate area of operation although it has won some routes from TACL. Similarly, Birkenhead Transport focuses on a geographically limited area encompassing Birkenhead, Glenfield and surrounding areas. Other bus companies, like Hanhams, also tend to concentrate on servicing localised routes. Of the smaller operators, only Ritchies appears to have the resources to compete effectively on a large scale in the Auckland market, but thus far, it has not made a significant effort to expand.

151. Where operators do compete, the benefits commonly associated with competition are clearly evident. On the Great South Road, where TACL, NZ Bus, and Howick & Eastern operate competing services, the service frequency is well in excess of the minimum level set down by the ARC. Fare competition between the services on the Great South Road also exists, with fare ‘specials’ periodically being offered by one or more companies. Also, Hanhams has stated that TACL has reduced its fares on its Bayswater service which competes with a service operated by Hanhams, in order to gain a competitive edge.

152. The relatively static market shares of the existing operators suggests that competition between them is relatively muted. One reason for this may be the threat of retaliation by an incumbent against a rival operator. This appears particularly likely with a large incumbent having extensive market share and which can use profits from routes on which it faces little or no competition to finance retaliation on other contested routes. Indeed, in 1994 in response to entry by MacBus, TACL introduced various measures which MacBus regarded as predatory. NZ Bus may also possess the financial strength and network presence in the Auckland market to expand its geographic coverage at the expense of smaller operators, if it chose to do so.

153. Incumbent local operators who already operate commercial services within a particular area are often at an advantage when competing for tender contracts with operators from other areas. The local operator may be able to run the

tendered services as an extension of its existing network at little additional cost. The incumbent is also more likely to have a greater ability than the new entrant to accurately forecast revenue in its particular area. This may give incumbents an additional advantage in winning net cost tenders.

Conclusion on the Constraint by Existing Competitors

154. The aggregation of TACL and NZ Bus scheduled bus passenger services, which would result from implementation of the acquisition, would remove a significant constraint on the performance of the principal operator, as well as a major stimulus to the efficiency and improvement of those services. The Commission considers that the constraint from smaller companies, such as Howick & Eastern and Birkenhead Transport, is unlikely to be sufficient to offset the loss of competition between NZ Bus and TACL because of their lack of financial strength and incentive to expand. Moreover NZ Bus has the potential, by moving into districts in which it currently has no presence, to impose a potential competitive constraint on TACL. Accordingly, the Commission concludes that if the acquisition were to proceed, there would be considerable lessening in the level of the competitive constraint provided by existing operators on the combined entity.

Constraint on Existing Operators from Competition in the Tendering Market

155. The Commission has undertaken a review of the major tendering rounds conducted by the ARC over the last 4 years.

156. The ARC awarded 225 contracts in the period under review, for the four sectors North, West, East and Central. The figure excludes school bus contracts. The number of bids received for these is shown in Table 5 below.

Table 5
Analysis of Bids Submitted in the ARC Tendering Rounds 1994-1997

	1 Bids lodged for tenders awarded	Adjusted Bids*	
		2 Total	**3** Bids from merged company included in Column 2
One bid	[ ]	[ ]	[ ]
Two bids	[ ]	[ ]	[ ]
Three bids	[ ]	[ ]	[ ]
Four bids	[ ]	[ ]	[ ]
Five bids	[ ]	[ ]	[ ]
Total	225	225	

Note: These columns also take account of TACL's acquisition of Devonport Bus Co and of exclusion of bids [ ].
*See paragraph 158 below for nature of adjustments.

157. With reference to column 1, for the [ ] contracts awarded on the basis of 2 bids, [ ] involved competing bids from TACL and NZ Bus. Of the [ ] awarded contracts for which 3 or more bids were received, a further [ ] involved competing bids from two companies. Several bids were made by Devonport Bus Co which was subsequently acquired by TACL.

158. Columns 2 and 3 of the table show the adjusted position. The adjustments were to combine TACL and NZ Bus bids and bids from Devonport Bus, and to exclude bids from other operators which were rejected by the ARC on quality or credibility grounds. After making these adjustments, [ ].

159. It should be noted, however, that there are considerable variations between regions within Auckland in the pattern of bids, and that the values of contracts awarded vary greatly.

Conditions of Entry/Expansion

Introduction

160. Entry conditions, including the nature and height of any entry barriers, must be determined before the threat of near or new entry, which might constrain the conduct of the combined entity, can be properly evaluated. Near entry might arise either from existing bus operators moving into a district in which they currently do not provide services, or from coach and school bus operators moving into the provision of scheduled bus services. Entry barriers are likely to be lower for near entrants than for new entrants.

161. The applicant contends that there are no barriers even to new entry into the market. Others spoken to commented that entry is not as straightforward as outlined by the applicant, and identified factors which are likely to hamper both the successful entry of a new operator, and the ability of a small incumbent to expand.

162. A review of the relevant entry conditions for near and new entrants follows.

Regulatory Requirements

163. The applicant claims that there are no significant regulatory requirements for those parties proposing to launch scheduled bus passenger services. On the face of it, this might appear to be so. A passenger service licence is required, but this can readily be obtained. A bus service operator in Auckland is required to register a commercial service with the ARC, but there are limited grounds on which the ARC can decline to accept a registration. The difficulty for a new entrant, however, is to find a profitable service which is not already being run commercially by an incumbent, or to win a competitive tender against an entrenched incumbent.

164. The Commission notes that, in recent years, the ARC has introduced various requirements which must be met by urban bus companies before they can operate a subsidised service. These include compliance with Vehicle Quality Standards, which are progressively being made more stringent. A performance bond must also be lodged with the ARC when a tenderer submits a bid for a subsidised service.

165. The Commission considers these requirements to constitute entry conditions rather than entry barriers. While the increasing stringency of the Vehicle Quality Standards means that, in many instances, entry could not be achieved by a new entrant without it investing in a fleet of new buses, this in itself, would not disadvantage the entrant against incumbent.

166. The Commission notes the comments of some parties who indicate that the regulatory environment is overly restrictive, and may have affected entry and expansion. For example, the organisation of the tendering rounds into 4 geographic sectors, and the restriction of the size of contracts, may have been a factor in deterring large scale entry. At the same time, it has been suggested that the limits on contract size have contributed to the difficulty for new entrants to obtain sufficient contracts in the same geographic area to provide a commercially viable service. In addition, it has been argued that the regulatory requirements, by being overly prescriptive, have reduced the scope for service innovation.

167. The Commission considers that the current regulatory environment is likely to stifle entry to some degree.

Capital Cost of Entry

168. The level of capital expenditure required for entry will be dependent upon the nature, scale and geographic extent of the proposed service. For instance, the funding requirements for a small scale operator involving a limited number of routes using mini buses would be relatively low. However, entry on a scale comparable to that, say, of NZ Bus, would involve a large capital outlay. The major capital items for an urban bus operation are a fleet of buses, depot(s), and other infrastructure, which might include facilities for repair and maintenance.

169. The applicant contends that a significant number of suitable second-hand city buses are readily available from Japan for between $15,000 and $30,000 each. However, almost all of the other parties whom the Commission consulted were of the view that for such an outlay, the purchaser would be unlikely to obtain a bus which meets the Vehicle Quality Standards specified by the ARC to operate subsidised services. Pavlovich, which attempted to commence urban bus work in 1995, envisaged competing for subsidised services using [ ]. However, Pavlovich has indicated that entry now is likely to involve a higher outlay due to the ratcheting upwards of the Vehicle Quality Standards by the ARC. The four major operators routinely buy new buses in order to obtain the maximum

points under the Vehicle Quality Standards. This requires an outlay of $230,000-240,000 per bus.

170. A new entrant contemplating entry via a subsidised service would face a risk either that it would be unable to recover the capital outlay on its buses over a 20 year period through losing contracts, which currently have a maximum duration of 4 to 6 years, or having a lower chance of winning contracts through using older refurbished buses. With the former, ability to recoup the capital outlay after allowing for depreciation would depend upon the current state of the second hand market. This can depend on the state of local bus passenger markets throughout the country, and even on tourism flows, given the limited substitutability between buses and coaches. For a new entrant such risks are likely to represent a significant obstacle, which may be reflected in difficulties in obtaining funds from financial institutions at rates comparable to the incumbents.

171. Another substantial item of expenditure is a depot at which buses can be parked and washed. It may also incorporate buildings in which repair and maintenance is carried out. The costs of establishing a depot could vary widely depending upon its size, location and the range of facilities it incorporates. The Commission understands that Howick & Eastern recently opened a new depot which cost about [ ]. In addition, the establishment of a new depot will involve planning and Resource Management Act consents.

172. The Commission considers that the capital requirements for *de novo* entry on a significant scale would involve the outlay of a substantial amount of funds, and would still be significant for a near entrant even though it might not require a depot. These outlays would be put at risk by the uncertainty of retaining routes, together with the possibility of retaliatory actions by an incumbent (see below).

Sunk Costs

173. Sunk costs are the costs of entry which cannot be recovered should the firm decide to exit the market. Because the incumbent has already expended its sunk costs, the entrant is at a disadvantage of having to factor those costs into its decision-making. Such costs deter entry by increasing the down-side losses should entry prove to be unsuccessful.

174. In his submission, Mr Copeland submits that the assets of a bus operation do not represent sunk costs because they can be re-sold at no loss apart from normal depreciation. However, information suggests that there are sunk costs associated with entry. These include the costs incurred in mounting a bid in a tendering round, such as the management time spent in preparing bids, including the conduct of market research (see below), which would be lost in the event that the company fails to secure sufficient contracts for a viable operation. Further, there may be sunk costs associated with the buses themselves (see above), with the scope for recovery of the initial outlay being dependent ultimately on the state of the bus re-sale market. Where a new entrant enters on a large scale, and then is forced to exit the market, it might

face difficulties in recovering its outlay due to the need to divest a significant number of buses. On the other hand, in some circumstances it may be possible to bid while having only an option to acquire vehicles.

175. The Commission concludes that sunk costs are likely to constitute a discernible barrier to entry.

Passenger Information

176. Before it is able to mount an effective attempt to enter the market, a new entrant requires information relating to potential passenger numbers in the targeted district. NZ Bus has claimed previously that passenger information can be obtained without any major difficulty. However, it would appear that incumbent operators are likely to have an advantage over newcomers because of their detailed knowledge of local market demand and service requirements. As noted above, a new entrant has to incur costs in obtaining such information. Such costs are not recoverable if the new services do not proceed.

177. It can be expected that an incumbent operator would have a competitive advantage when determining the appropriate bid to run a subsidised service. One bus company [ ] told the Commission that it spent [ ] to develop a suitable pricing template and to carry out the necessary market research prior to lodging a bid for subsidised services [ ] of Auckland. However, it failed to recover this expenditure when it did not win sufficient contracts to allow entry on a viable scale.

178. The Commission also notes that the costs and the time to develop familiarity with new services may make entry difficult for a new entrant with limited financial resources. The information asymmetries are likely to make it difficult for a potential entrant to submit a competitive bid during a tendering round. This appears to have contributed to an overestimation of likely revenue by MacBus before it commenced services on the North Shore in 1994. Even a large scale entrant with the financial resources to fund market research is likely to encounter difficulties in obtaining access to patterns of patronage and other information to the same level of detail as an incumbent operator. To indicate the importance of such information, TACL employs several highly experienced scheduling personnel.

179. The Commission concludes that access to passenger information is likely to constitute a barrier to entry.

Economies of Scope and Scale

180. Booz-Allen suggest that ". . . there are few economies of scale or scope in bus operations, although some company sizes may be more difficult than others." However, this comment is somewhat ambiguous, since differing efficiencies of varying company sizes may reflect scale economies. Some transport

economists have argued that there are scale economies in bus operations.[18] These economies arise in various ways explained above. In particular, certain basic costs of a bus operation tend to be relatively unchanging over quite wide ranges of activity – management, administration, depot facilities – so that an expansion of services allows these costs to be spread more thinly. There is, however, a limit to which economies of scale can be achieved on the basis of a single depot. Because of the geographical spread in the provision of bus services, a growing operation ultimately can only expand further by moving into a new district. This could require either the establishment of a new depot, or the incurring of substantial dead-running costs.

181. In addition to scale economies, the provision of local bus services appear to offer economies of scope. These result from the operation of complementary routes in a larger district network, or the deployment of buses in related activities (eg school bus services or charter work). For example, a bus which has just completed a scheduled service might be switched to a service on an adjacent route, or possibly to a school bus route. This suggests also that apart from other bus operators, the most likely entrants are those already operating such complementary services in the same or similar geographical areas.

182. *De novo* entrants are likely to experience difficulties in winning sufficient contracts to be able to operate at a size where most of the scale and scope economies can be realised.

183. The Commission concludes that scope and scale economics constitute some degree of barrier to entry.

Access to Routes

184. To enter the bus passenger market on a viable scale requires a new entrant to win a sufficient number of routes in an open tendering process. As noted above, the limited size of contract packages appears to militate against new entrants obtaining the necessary critical mass, and to enable them to withstand any possible retaliatory action from an incumbent, although one party suggested that small packages assist small operators. The Commission acknowledges that the CPP's have been redrafted to allow more flexibility, and that there is scope for bidders to lodge group bids (ie, aggregating the number of individual tenders to form a larger composite package of routes). Nevertheless, the experience of Pavlovich and MacBus, albeit prior to the redraft, as well as the comments of an overseas operator (see below), support the view that entry via the tendering process is difficult, and may constitute an entry barrier.

185. The Commission concludes that access to routes is not straightforward.

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18 See: C. A. Nash, "British Bus Deregulation", *Economic Journal*, vol. 103, p. 1045; and Kenneth J. Button, "Economic Theories of Regulation and the Regulation of the United Kingdom's Bus Industry", *Antitrust Bulletin*, Fall 1989, pp. 502-03.

Incumbent Response

186. The threat of retaliation by an existing operator in defence of its 'territory' has to be factored into entry or expansion decisions. In the past, some new entrants have faced such responses. That response has taken several forms. One example is registration by an existing operator of a commercial service over or adjacent to the subsidised service routes operated by the entrant, reducing the revenue, and possibly making it uneconomic to continue with the contract. Another example is that large operators in particular, because of their financial strength and ability to cross-subsidise using the profits earned on non-contested routes, have the potential to deter a fledging entrant operating on a limited number of routes. Another practice is "sweeping the clock", that is, for one operator to change the departure time of its buses to precede by a few minutes the times scheduled by its competitor.

187. The entry of MacBus provides an illustration of the strategies available to a large incumbent to deter or frustrate new entrants. MacBus was the successful bidder for some contracts on the North Shore. In the time between the awarding of the contracts and the commencement of the services, TACL registered commercial services along the same and similar routes. MacBus claims that TACL engaged in other predatory practices. As a result, patronage was reduced below expectations, contributing to the departure of the company from the market. While the ARC has subsequently introduced a rule to block that loophole, it serves to illustrate the likely response of an entrenched incumbent to the entry of a competitor.

188. Similarly, the Commission has been advised that prior to a tendering round in [ ], TACL commercially registered various high density routes on a strategic basis. During the subsequent tendering round, TACL was then able to successfully tender for a number of complementary routes at prices substantially below those which a prospective entrant [ ] was able to offer.

189. Given the recent history of such behaviour in the Auckland market, small operators are likely to think twice before entering or expanding their operations beyond their traditional territories.

190. The Commission concludes this is likely to be a substantial entry barrier.

Access to Technology

191. The Commission concurs with the views expressed by Booz–Allen that buses are relatively "low tech", and that new technology for buses is driven by larger markets overseas. There appear to be no difficulties associated with access to technology.

Availability of Personnel

192. The Commission has not identified any difficulties associated with obtaining the appropriate personnel to undertake the range of operational, administrative, repair and maintenance and other activities of an urban bus business.

Availability of Vehicles

193. The Commission's inquiries have revealed that buses are readily available from various sources. There are currently two bus assemblers in New Zealand – The Design Coach and Body Co and Coachwork Central. Additionally, buses may be imported either new or second-hand without difficulty. As noted previously, there may be difficulties in meeting Vehicle Quality Standards and other certification requirements.

Access Repair and Maintenance Facilities

194. A pre-condition of entry into this market is access to repair and maintenance facilities. This activity can be undertaken either in-house by specialist staff – which would require the necessary facilities, usually at the depot - or can be contracted out. Access to these services does not seem likely to pose a problem for a new entrant.

Access to Bus Stations/Bus Stops

195. All bus companies have access to the Auckland City Council's Britomart terminal in central Auckland, as well as to all bus stops throughout the greater Auckland region.

196. TACL owns two interchange facilities at Otahuhu and New Lynn. The ARC has raised concerns about the sale of these facilities, were the new owner to exclude other operators. TACL has advised the Commission previously that it can, and does, allow third parties to use these facilities, although access does not appear to be open to all-comers on an unrestricted basis. However, in the event that access were denied post-acquisition, it would be necessary to consider whether such behaviour would constitute a breach of the restrictive trade practice provisions of the Act.

197. The Commission concludes that access to bus stations and bus stops is unlikely to constitute an entry barrier.

Conclusion on Conditions of Entry/Expansion

198. The Commission considers that while each of the entry conditions outlined above do not necessarily individually represent a large barrier to entry, their cumulative effect could be to raise a substantial aggregate entry barrier. Entry must be on a sufficient scale to be viable, and this requires an entrant to win a sufficient number of contracts. The entrant must put at risk substantial funds in prior market research, whose results are typically incomplete and imperfect given the variations in patronage through the day, week, season and year. A

bond is required. The entrant must invest in buses and depots, and the contract length may not be of sufficient duration to allow that investment to be recouped. Prudence suggests that provision would have to be made for retaliation by the incumbent. Collectively, these factors suggest to the Commission that entry on a commercial basis is likely to be quite difficult. This has been reflected in the experience of entry and expansion to date. There has been no successful entry on a significant scale by a *de novo* entrant in the market since deregulation, although a few have tried and, apart from NZ Bus, existing operators have not significantly expanded their market coverage.

Assessment of the Constraint by Potential Competition

Introduction

199. The Commission has acknowledged in its *Business Acquisition Guidelines* that potential competition can act as a constraint on business activity. An assessment of the nature and extent of that constraint represents an important element in the Commission's evaluation of competition and market dominance.[19] In order for the threat of market entry to be a sufficient constraint on the exercise of market power, however, it must be likely, sufficient in extent, timely and sustainable (ie, the "*lets*" test).[20]

Likelihood and Sustainability of Entry

200. The Commission agrees in principle with the applicant when it states: "In terms of new entry (whether by new or existing players) the test is whether the merged firm would be constrained from increasing its prices or lowering services by the threat of new entry". The absence of entry may show that prices are at the competitive level. However, in order for potential competition to have an effective constraint on incumbents, entry must be likely in commercial terms. In addition, entry is likely only if there is likely to be a lasting economic incentive.[21] The Commission earlier has identified and discussed at length, a number of entry barriers which, cumulatively, are likely to make it difficult for an entrant to establish a presence on a commercially viable and sustainable basis.

201. In contrast, the applicant claims that the market is competitive, and that entry barriers are low. However, while there has been a relatively short period since deregulation in 1991 the entry which has been attempted on a number of occasions has had a marked lack of success. NZ Bus entered, but only by acquiring an existing concern. Hanhams entered about four years ago by providing subsidised services on a small number of routes, and continues to do so on a very minor scale. The company is currently being offered for sale. MacBus and Cesta both entered but failed. MacBus entered the market on a limited basis in 1994, but despite its industry experience and financial support it departed the market within six months claiming predatory behaviour by

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19 See p. 19 of the Commission's publication, *Business Acquisition Guidelines 1996.*

20 *Ibid.*

21 *Ibid*, p.19 and 20.

TACL. Cesta began operating bus services in 1994 also, but only lasted about eighteen months before exiting the market because of inadequate equipment and poor performance. Pavlovich attempted to enter the market in 1995 but failed to secure sufficient contracts to make it commercially viable. Ritchies, which exited the market several years ago, recently began a limited operation on three new routes which they are trialing in the far west of the market.

202. On the basis of the analysis and the information received, the Commission has formed the view that entry on a significant scale is neither likely nor sustainable.

Extent of Entry

203. As indicated in the *Business Acquisition Guidelines* the Commission concludes that effectively to constrain existing market participants the threat of entry must be at a level and spread of sales such as to be likely to cause the incumbent to react in a significant manner.

204. The Commission has found that entry on a niche market basis – on a modest or localised basis, or on new routes or at off-peak times – is possible. For example, taxi companies have lodged successful bids to operate subsidised bus services at off-peak times, and smaller operators, such as Hanhams and Ritchies, have launched bus passenger services on a very small scale on a niche market basis. However, such entry is unlikely to be sufficient to provide an adequate constraint on the combined entity in the broader market. Such constraint would require the establishment of an operation on a substantially larger scale. As explained above in relation to entry barriers, larger scale entry is likely to present difficulties for a prospective operator.

205. In its submission, FirstGroup plc comments that the likelihood of entry by overseas bus operators into the Auckland market other than by acquisition of the major incumbent is remote. The company considers that the small size of New Zealand markets, the fragmented nature of the tendering process and the modest size of tender packages, would not make it commercially attractive for a large player to expend the management time and establishment costs in securing entry on a small scale in a new and distant market. This view accords with that in a submission from a confidential industry source, which commented that only TACL offers the critical mass to justify the investment, and the consequent demands on management time and expertise, that controlling and developing the business would demand.

206. Having regard to these factors, the Commission has formed the view that it is unlikely that new entry could be achieved on a scale sufficiently large to effectively constrain the combined entity.

Timeliness of Entry

207. The *Business Acquisition Guidelines* specify that for entry to be timely, it must be possible for it to be achieved within two years. Subject to the preceding comments, it is considered that if a determined firm were to enter the market, entry could be achieved within that timeframe.

Conclusion on Constraints from Potential Competitors

208. The Commission concludes that entry into the relevant market might be expected to be achieved in a timely manner, but entry would not be likely, sufficient in extent or sustainable enough to constrain dominance.

Constraints From Alternative Modes of Transport

209. The Commission has considered the competitive constraint likely to be provided by a range of alternative modes of transport on the conduct of the combined entity.

Private Motor Vehicles

210. Auckland is characterised by very high levels of private car ownership, with around 90% of households in the region owning one or more vehicles. In addition, the privately-owned car is the main means of transport used by residents to travel both for work and for recreational purposes. Evidence suggests that around 70% of Auckland residents use private vehicles to travel to work.

211. Nonetheless, Commission inquiries and the information discussed above indicate that a relatively high proportion of those who use buses and other modes of public transport do not own, or do not have ready access to, private motor vehicles. Competition from the private car is also restricted in some areas by a number of factors including road congestion and the absence of sufficient parking. At the same time, there is a very substantial proportion of private motor vehicle users who are wedded to car use, and who would not consider public transport as an alternative, even if the wider costs of car use were to increase markedly.

212. In the light of this information, the Commission considers that at the margin, private motor vehicles probably provide some limited competitive constraint for some patrons of bus passenger services in the relevant market, and will continue to do so post-acquisition.

Suburban Rail Services

213. Tranz Rail is the sole operator of commuter rail passenger services in the relevant market. The company currently provides services on two lines, one extending from central Auckland to Waitakere in the west, and the other from central Auckland to Papakura in the south.

214. Rail passenger volumes have doubled to around 2 million passenger trips per year over recent years. This follows the introduction of new diesel multiple units, and scheduling improvements. The availability of suburban rail services provides some competition to bus services in the corridors along the Papakura railway line and, to a lesser extent, along the Waitakere line, particularly for those commuters who reside in close proximity to a station. While there is some scope to increase capacity, capacity restraints are being reduced by increases in platform length. In the short term this appears to have led to a higher level of usage. In general, there are differences between the corresponding rail and road routes, with rail offering fewer stops, and often passing through industrial areas where patronage is low.

215. Suburban rail services are likely to provide some limited competitive constraint on the combined entity on the routes mentioned, but in the absence of an extensive rail network in greater Auckland, they do not provide any constraint over most routes, and the region as a whole.

Harbour Ferry Services

216. The three harbour ferry services in Auckland operated by Fullers Group have experienced growth in patronage, but still make up only [ ][22] of total public transport services in Auckland. The Birkenhead and Bayswater ferries have been marketed under the brand ‘Link’ as part of a joint venture partnership with the TACL. The Devonport ferry is also due to be renamed as a ‘Link’ product some time this year. Although the ownership of the ‘Link’ ferries remains with Fullers Group, the present relationship the company has with TACL is likely to continue following the implementation of the proposed merger. Staff believe that constraint from ferries on the combined entity is likely to be limited because of this relationship. Indeed, TACL has advised staff that its Bayswater bus service into the city does not actively compete with the Bayswater ferry, but rather aims to provide an integrated bus and harbour ferry service for passengers.

217. Furthermore, ferries have become a popular form of transport and in some areas, are the only acceptable means of transport. In Devonport, for example, where the ferry service has been operating for a number of years, there is no direct bus service from Devonport into Auckland city that competes with the ferry.

218. Accordingly, the Commission considers that ferries are unlikely to constrain the combined entity to any significant extent.

Taxis

219. The number of taxis available for hire in Auckland has increased substantially over recent years. However, while taxis may provide some constraint on short routes, and particularly in the weekends or late at night, they are expensive in

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22 This percentage is based on passenger boarding figures which have been compiled by the ARC.

comparison to bus services. It seems likely that most bus users would not consider taxis to be an effective substitute. Accordingly, the Commission concludes that taxis would not provide an effective constraint on the combined entity for the great majority of bus users.

Other Modes of Transport

220. Other modes of transport available in the greater Auckland region include cycling and walking, but apart from relatively short journeys, these forms of transport are unlikely to provide a significant constraint on the combined entity.

Conclusion on Constraints from Alternative Modes of Transport

221. The Commission's view is that private motor vehicles provide some limited competitive constraint for some patrons of bus passenger services. Rail passenger services on the two routes where rail operates also provide a limited constraint, but not significantly over the geographic market as a whole. Other modes of transport are unlikely to provide much of a competitive constraint on the conduct of the merged entity. However, the limited constraint provided by non-bus transport modes appears likely to fall well short of that likely to be provided by another large bus operator competitor. The Commission therefore concludes that competition from other forms of transport, by itself, would not constrain the combined entity.

Constraint by the ARC

222. The Commission previously considered the countervailing power of the ARC in Decision 318. In the present decision it has had the opportunity to revisit the issue, and has benefited from considerable additional information on the role and regulatory practices of the ARC. As described earlier in the report, the ARC has a major role in the subsidisation and regulation of bus passenger services and in the allocation of routes in the market.

223. The ARC's influence on the nature and extent of competition in the market can potentially be exercised in various ways, although as noted below, it has not always been willing to exercise its powers in a timely manner. The ARC's statutory powers include the following:

- the funding of subsidised services including the concessionary fare schemes, which together cost $30 to 40 million per annum, and through that the power to control the tendering process for subsidised services;
- the structuring of the tendering process including the numbers of routes offered, the length of the contracts, the maximum fares, frequency of service, and Vehicle Quality Standards;
- the ability to influence the fare levels for commercial services, both through fixing the fare schedules for subsidised services, and through the concessionary fare schemes;
- the significant political influence which it can bring to bear;

- the ability to decline a contract and/or to re-tender, and, where only one bid is received, to negotiate a price with the tenderer;
- the ability to decline registration of commercial bus passenger services on certain prescribed grounds;
- the ability to issue gross tenders in which the entire financial risk for the service is borne by the ARC;
- the power to cancel contracts if the operator fails to comply with the terms and conditions of such contracts, and
- to “contract over” existing services where existing commercial services are considered to be unsatisfactory.

224. The potential influence of the ARC can probably best be illustrated by the events surrounding the 1997 fare increase, which involved protracted negotiations between the ARC and bus operators. Bus operators justified the increase on the basis of a study undertaken by Price Waterhouse, which showed that bus costs had increased by 10.6% in the six year period since the previous fare increase. In theory, bus operators had the option of increasing the fares for commercial routes, and of registering additional subsidised services as commercial with the same result. However, the Commission has been told previously by the Chief Executive of TACL that bus companies had explored ways of raising fares for commercial routes, but were unable to find any practical solution without corresponding increases on subsidised routes.

225. On that occasion the ARC vigorously resisted the increase. However, fare changes, being highly visible, are likely to become a political issue, and so ARC resistance would be expected to be strong. In other areas within its purview, its response is likely to be more circumscribed. The reasons are as follow:

- in the tendering market the ARC is dependant to some extent on there being competitive bidding which would not be likely to continue on many routes if the proposal were to proceed;
- the ARC has shown a reluctance on past occasions to exercise its full powers. For example, Cesta was allowed to continue to operate a manifestly sub-standard service for a period of about 18 months before its contracts were cancelled;
- the ARC has only limited grounds under the TSL Act on which to decline commercial registration of public passenger services, and has only declined one application to date;
- the ARC’s powers are likely to reduce as the number of subsidised services declines, and the number of commercial routes increase;
- the ARC’s criteria regarding quality standards are not fully developed, and the ARC has only three staff to monitor compliance (although complaints are received direct from the public).

226. The critical issue which arises is whether the ARC’s influence on the nature and level of competition in the market is likely to provide an effective constraint on the combined entity. The acquisition increases the potential for the merged entity to manipulate and influence the conduct of the ARC, and for

'regulatory capture' to emerge. The perception of some is that the relationship between the ARC and TACL is close, possibly to the extent of being a strategic partnership. The Auckland City Council and others have stated that TACL already can prevent change from occurring if it does not see this as being in its self-interest. In addition, the acquisition would reduce the number of actual and potential bidders, thereby significantly reducing the options available to the ARC in the tendering process (especially in the Southern and Central Sectors), and the scope for it to limit the market power of the combined entity. NZ Bus is the operator most likely to be able to take routes from TACL, and this has happened in recent years.

227. The applicant argues that the ARC would continue to exercise substantial countervailing power. Other parties agree that the ARC's power would not diminish significantly. For example, TACL comments that a combined NZ Bus/TACL would have been unlikely to have exercised any more leverage during the negotiations on the fare increase than TACL by itself. However, this is perhaps not surprising given that at that time the various operators had formed a united front in their negotiations with the ARC.

228. It has also been pointed out that in the Greater Wellington market, in which NZ Bus holds a very large market share, and where it faces limited actual and potential competition, there have been no fare increases since 1992, and that while subsidies have increased this has been accompanied by an increase in the volume and quality of services. However, without conducting a detailed analysis it is difficult for the Commission to ascertain whether NZ Bus might be exercising market power in that market.

229. On the basis of present information, the Commission considers that, post-acquisition, the balance of power between the ARC and the combined entity is likely to become more even. On the one hand, the merged company would appear to be the predominant supplier of scheduled services in the market, but on the other, it would be dependent for much of its funding on a monopsony buyer. The assessment is a difficult one. The Commission believes that without ARC regulation the merged company would be dominant in the market. However, the Government has chosen to apply a heavy handed form of industry-specific regulation in which the regulatory power of regional councils is intended to counter the market power of major incumbents. Hence the Commission has concluded, on balance, that the merged entity would fall short of dominance.

230. The Commission notes that, to foster competition, consideration is being given to the development of an output-based method of funding for public transport services (ie payments to operators based on some measure of output such as numbers of passenger journeys). The objective of such a change would be to allow operators greater flexibility, and would improve the incentives for operators to increase patronage. The Commission notes that this would also be likely to either lower or slightly lower regulatory barriers to entry into the market. However, there is no certainty at this stage whether such measures will be introduced, or the timing. As the ARC would retain its powers to intervene in the market should the proposed new scheme be introduced and be

found to be unsatisfactory, the Commission has concluded that the countervailing power of the ARC would not be reduced.

Conclusion on Constraint by the ARC

231. The Commission finds that the ARC currently provides strong competitive discipline on the behaviour of TACL. On balance, the Commission concludes that the countervailing power of the ARC would continue to provide an effective constraint on the merged company.

CONCLUSION ON DOMINANCE

232. In relation to the market for the provision of scheduled bus passenger services in the greater Auckland metropolitan region, the Commission considers that without the constraint possible through the powers of the ARC there would be dominance concerns. The resulting market share would be in the vicinity of 90%, and existing and potential competitors would be likely to have only a modest role in constraining the merged company. However the ARC's strong statutory powers to regulate the market have been determined to provide sufficient countervailing power for the Commission to conclude that the merged entity would not acquire or strengthen a dominant position. The Commission notes, however, that should the market be further de-regulated in the future, the market would almost certainly be left in the control of a dominant incumbent with all of the disadvantages to competitors that this would imply.

DETERMINATION

233. The Commission, pursuant to s 67(3)(a) of the Act determines to give a clearance for New Zealand Bus Ltd, or any interconnected body corporate, to acquire either all the assets and business, or all of the shares of Transportation Auckland Corporation Limited.

Dated at Wellington this day of 1998

P C Allport	R N Taylor	E C A Harrison
Chairman	Member	Associate Member