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CHAPTER 12

Response to NZCC Draft Determination On matters concerning air freight markets

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Summary and introduction

- 12.1 The Commerce Commission's overall position regarding air freight markets is that the net welfare benefit from the alliance, relative to the counterfactual, is zero. While the Commission appeared not to take issue with the freight benefits claimed by the applicants, it did believe that unquantified detriments arising from a substantial lessening of competition (SLC) in several markets would approximately cancel them out. The Commission came to the preliminary view that the alliance would result in a SLC in the NZ domestic air freight market (the Domestic Market), a market they define as the Tasman belly hold air freight market (the Tasman Market), and another set of markets they define as the NZ – international belly hold air freight markets (the International Market).
- 12.2 The Applicants demonstrate below that each of these conclusions regarding competition impacts is incorrect. The Commission's preliminary findings have arisen from presumptions they were encouraged to make on questions of fact by various third party submitters. The Applicants present the factual evidence which refutes these presumptions.
- 12.3 First the Applicants canvass the state of competition in the NZ domestic air freight market—a market in which neither Air New Zealand nor Qantas presently participates. Second the Applicants demonstrate that, at least for the Tasman and International markets, belly hold air freight is not a separate market from dedicated freighters. Third the Applicants apply this market definition result to the Tasman market to demonstrate that the alliance is unlikely to result in a SLC. Fourth the Applicants apply this market definition result to the International markets to demonstrate that the alliance is unlikely to result in a SLC.

NZ domestic air freight market

- 12.4 The Commerce Commission's preliminary view is that “the proposed Alliance would have or would be likely to have the effect of substantially lessening competition in the domestic air freight market when compared with the counterfactual.”¹
- 12.5 This view was based on several incorrect suppositions of fact. The first is contained in the following statement by the Commission:
- “All freight in New Zealand is carried by passenger aircraft except for some mail and courier parcels which are carried in aircraft owned by NZ Post and NZ Couriers. Virtually all freight carried in passenger aircraft is carried by Qantas and Air NZ as Origin Pacific operates small aircraft that are not suited to carrying freight.”²
- 12.6 Firstly Qantas does not carry freight in the New Zealand domestic market, either on its own account or for other freight organisations. For this reason by itself, the proposed alliance would not lead to concentration in this market.
- 12.7 Secondly, Air New Zealand does not participate in the New Zealand domestic air freight market, either. Air New Zealand's belly hold space on domestic passenger flights is leased to NZ Post under contract.³ There is

¹ NZCC, para. 556.

² NZCC, para. 552.

³ Effectively all of the capacity of the four Air New Zealand domestic airlines is sold to NZ Post (Contract expires []).

some limited use of Air New Zealand belly hold space on domestic flights to reposition international cargo between gateways. Thus, while it is technically true that some domestic airfreight is carried on passenger aircraft operated by Air New Zealand, that statement obscures the important fact that this freight capacity is sold into the market by NZ Post, not Air New Zealand.

12.8 The Commission doubts the existence of potential competitors who might constrain the alliance,⁴ but NZ Post is an important competitor (if not the dominant air freight capacity provider) in the domestic NZ air freight market. NZ Post also operate dedicated freighter capacity ranging from the B737 to the F27 and the Metroliner. Origin Pacific also operate freighter services with their passenger aircraft (ATR /J32's). Parcel –Line operate a convair for NZ Couriers.

12.9 According to its 2001 Annual Report, NZ Post does not limit its scope to “*some mail and courier parcels*” as the Commission claims.

“Carrying hundreds of thousands of cubic metres of goods – everything from live organs to automotive parts to birthday invitations – across New Zealand, on time and safely, is the challenge met daily by New Zealand Post’s Express and Logistics team.”⁵

12.10 In addition to the belly hold space it leases from Air New Zealand, NZ Post, through its joint venture AirPost Limited, operates a significant fleet of aircraft in its own right.

“During the year, the New Zealand Post Distribution capability was strengthened through the acquisition by AirPost Limited of a B737-200QC from Air New Zealand. It complements the six other smaller aircraft operated by AirPost, together with the 60 trucks, all in New Zealand Post livery, operated by owner-driver contractors. AirPost is a joint venture with Airwork Limited.

“To extend the distribution supply chain competencies, New Zealand Post offers international freight forwarding and customs clearance services, specialising in both air and sea shipments.”⁶

12.11 Should the alliance choose at some later date to enter the New Zealand domestic air freight market, it would face potential competition from Virgin Blue as well as actual competition from NZ Post, Parcel-Line and Origin Pacific. The likelihood that Virgin Blue would operate B737 aircraft on the domestic New Zealand routes does not place it at any particular disadvantage to the alliance, as the Commission appears to believe,⁷ because the alliance would also be operating with that aircraft type. The various cargo disadvantages of the B737, noted elsewhere in this report, would apply equally to the alliance and its potential VBA competitor.

12.12 Thus, in response to its question 35, the Applicants submit that the Commission’s preliminary conclusion regarding competitive effects of the alliance in the NZ domestic air freight market is erroneous. Each of the grounds for that conclusion is contradicted by the facts:

⁴ As the alliance is not now, nor is it likely to be a participant in the NZ domestic air freight market there is no present need for any such constraint. However, even if in future the alliance opted to enter this market there are real competitive constraints posed by existing competitors.

⁵ NZ Post Annual Report, 2001. Section headed “Express and Logistics”.

⁶ Ibid. Subsection headed “Distribution”.

⁷ NZCC, para. 553.

- Qantas does not sell airfreight services to the NZ domestic market, and does not convey cargo on its NZ domestic flights;
- Air New Zealand does not sell airfreight services to the NZ domestic market;
- While Air New Zealand passenger flights do convey domestic cargo, they do so under a leased belly hold space arrangement with NZ Post.
- NZ Post is itself a formidable competitor in this market. With its own fleet of dedicated air freighters and seamless vertical integration into freight forwarding and logistics, mail and express post contracts, it would countervail any future attempts by the alliance to exercise power should it enter the domestic air freight market.
- Further potential competition would be created by the entry of Virgin Blue. That competitive threat would not be blunted by the likely use of B737s by Virgin Blue, as the alliance would also utilise this aircraft type.

12.13 In conclusion, the proposed alliance would not increase concentration in the NZ domestic air freight market. NZ Post would strongly constrain the behaviour of the alliance should it choose in future to enter this market. Therefore the alliance would not lead to a substantial lessening of competition in the NZ domestic air freight market.

Why there is not a belly hold-only market

12.14 The Commerce Commission restricted its competition analysis to belly hold freight markets on the strength of the following tentative conclusions. *“The economics of belly hold cargo services and dedicated cargo services mean that substitutability is weak on both the supply and demand sides. The Commission will therefore consider the cargo services supplied on passenger flights to serve a market distinct from that supplied by dedicated freighter airlines.”*⁸ The Applicants will demonstrate here that these tentative conclusions are inconsistent with the facts.

12.15 As a matter of fact there are both passenger and dedicated freight airlines conveying air freight on the Tasman and International routes. With the exception of oversize and special livestock items such as horses, which can only be carried in dedicated freighters, either type of aircraft is capable of meeting shippers’ air freight requirements, and the players do in fact compete with each other for this business. Given these facts it is necessary to scrutinise very closely the reasoning through which the Commission arrived at its counterintuitive conclusion.

12.16 The Commission cited the following key differences between cargo services offered by passenger and cargo airlines:⁹

“freight rates are much lower for freight carried in belly holds of passenger aircraft;”

“the availability of belly hold depends on route structures and flight frequency generated by the economics of the passenger market;”

“with the exception of Asian Express which flies across the Tasman, scheduled dedicated cargo airlines tend to serve New Zealand as one

⁸ NZCC, para. 201.

⁹ NZCC, paras. 198-199.

inbound and one outbound sector on a longer international route that may take a week to complete;”

“the operating costs of providing dedicated freight services are much higher than the costs of providing belly hold. Belly hold is available at a lower marginal cost because most costs on passenger flights can be attributed to serving passengers.”

12.17 The first and fourth of these points are incorrect. The second point, while correct, is irrelevant to the question at hand—whether dedicated freighters are able to substitute for belly hold to a sufficient degree to discipline the conduct of the alliance. The comment in the third point about those cargo airlines that fly one way around the world is irrelevant.¹⁰

12.18 Relying on these questionable points, the Commission accepted the view put to them by third party submitters, “*that dedicated freight services are not substitutable for passenger service belly hold for various reasons including differences in price, route network, and frequency of flights. Consequently, the type of cargo and customer base tends to be different between the two types of services. Dedicated freight airlines have told the Commission that they do not attempt to provide a substitute for passenger airlines’ cargo services. Rather, they discover and develop niche markets where demand can be met by either infrequent scheduled flights or by chartered flights.*”¹¹

Demand side substitution

12.19 The Commission’s conclusion that there is weak demand side substitution between belly hold and freighter services rests heavily on their acceptance of the claim that freight rates are much lower for belly hold freight. In fact, once comparable services are considered, pricing for general cargo on freighters is in line with pricing for belly hold freight.

12.20 Some confusion may exist because dedicated freighters will attract a premium for items such as livestock and oversized articles (e.g. boats/cars), which are not carried on passenger aircraft. However, setting aside that issue, there is no difference in price if all other aspects of the service are equal (e.g. day of week and time of day), as is seen in the following sample of standard air freight prices, applicable to either belly hold or dedicated freighter services:¹²

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¹⁰ Cargolux, for example, flies the Tasman route only in the Eastbound direction. However this ‘imbalance’ is substantially remedied by the fact that Lufthansa cargo flies the Tasman route only in the Westbound direction. Thus a freight shipper is capable of buying dedicated freighter space operating in either direction. As an aside, it is worth noting that a similar pattern – in which different operators operate round-the-world in different directions, complementing what are generally referred to as ‘pendulum’ services, also holds for maritime transport.

¹¹ NZCC, para. 200.

¹² Information provided by Air New Zealand.

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12.21 In addition to the abovementioned origin-destination and cargo type differences, prices can vary by volume presented, day of week or time of year. These are the factors which drive price differentiation in air cargo, not the type of aircraft which is used. Qantas estimates that approximately 95% of Tasman air freight is capable of being carried either in belly holds or in dedicated freighters. If a dedicated freight operator attempted to hold the dedicated price higher than the belly hold price, then shippers would simply hold consignments until the next available passenger service.

12.22 As there is no price differentiation based on belly hold – freighter distinctions, any lack of demand side substitution between these modes would need to be premised on differences in their respective handling requirements, space or mass limitations. Generally speaking, no such differences exist. The majority of freight types may be carried in either belly hold or dedicated freighter mode. For example, Air New Zealand carries chilled meat to Europe via its joint freighter operation with LH (AKL-MEL-KUL-PAK-FRA). Air New Zealand also carries the same product on its passenger services (AKL-LAX-LHR) at the same freight rate.

12.23 To the extent that there is any difficulty in demand side substitution, it is entirely in one direction: dedicated freighters can substitute for any freight carried in belly holds, whereas passenger aircraft cannot substitute for freighters in transporting some oversize items, livestock, and certain categories of dangerous goods. This directionality is significant because the type of substitution which is easiest is precisely the substitution threat which will mitigate any market power held by the alliance. This is consistent with the purposive approach to defining markets, which takes the services relevant to the conduct at issue and considers substitutes for them on both the demand and supply sides. The essence of this discussion was contained in the response to the Commerce Commission's questions for the Applicants.

12.24 To summarise, the Commission's conclusion that demand side substitution is weak is not able to be supported, because it presupposes a non-existent price differential between equivalent cargo services provided by belly hold and freighters, and it overlooks that there already is a great deal of demand side substitution.

Supply side substitution

12.25 The Commission's view that supply side substitution is weak rests principally on its contention that the operating costs of providing dedicated freight services are much higher than the costs of providing belly hold. This assumption may underlie the Commission's acceptance of submissions by some dedicated freight operators that they do not attempt to compete with passenger airlines, but rather they develop niche markets.

12.26 As a general proposition, this assumption seems at odds with the fact that pure freighters do and will continue to provide 44% of the world's air cargo capacity.¹³ Dedicated freighters represent 12% of the world total airplane fleet, but as each freighter carries between 6 and 10 times as much cargo as an equivalent-sized passenger airplane, they are anything but a niche cargo delivery channel.¹⁴ If the Commission is correct that the economics

¹³ Boeing World Air Cargo Forecast 2002/2003, p. 92.

¹⁴ Ibid., p. 91.

of freighters are so vastly inferior to the economics of belly hold cargo, then why have commercial airlines chosen to invest in so much dedicated freight capacity?¹⁵ Furthermore, the notion that dedicated freight operators operate only in niche markets appears difficult to reconcile with the fact that many of them, such as DHL, FedEx Express, and UPS Air Cargo are much larger international airlines than Air New Zealand or Qantas.¹⁶

12.27 Part of the answer rests on the fact that special conditions must be met in order for belly hold cargo to achieve low marginal costs. The ideal conditions involve high passenger load factors and high cargo load factors. For any particular route, this means that the ratio of cargo demand to passenger demand must be very close to an ideal value for each aircraft type. If the cargo to passenger demand ratio is higher than this ideal figure, then the economics of belly hold are not particularly good, because extra passenger flights, leading to lower than ideal passenger load factors, would be needed to accommodate the extra freight as belly hold. If the cargo to passenger demand ratio is lower than this ideal figure, then the economics of belly hold suffer as well, because the consequent low cargo load factors mean that the cost recovery burden allocated to freight must be borne by a small quantity of cargo.

12.28 Publicly available information on passenger aircraft helps to identify these ideal cargo to passenger ratios. The Qantas web site¹⁷ provides the following information concerning four of its aircraft types:

Aircraft type	Belly hold cargo capacity (kg)	Passenger capacity, usual seating	Average kg/pax at 100% load factors, cargo and pax
B737-476	2,868	138	21
B737-800	6,220	168	37
B767-338ER	9,730	254	38
B747-438ER	10,900	357	31

12.29 While comparable data for NZ-international city pairs has been difficult to source, an indication of the relative passenger and cargo flows in the region can be gained by examining aviation statistics compiled by the Australian Government's BTRE (now a part of the Department of Transport and Regional Services).¹⁸

¹⁵ One specific example, among many, is the fact that Singapore Airlines, well known for its passenger operations, operates 12 B747-400F 'Mega Ark' freighters.

¹⁶ For factual data on the revenues, profits, and fleet sizes of these airlines, see www.dhl.com, www.fedex.com, and www.aircargo.ups.com.

¹⁷ http://www.qantas.com.au/info/flying/inTheAir/ourAircraft/our_aircraft

¹⁸ Data presented here was obtained from a table entitled "Table 6. Major international airline city pairs, 1999/00 and 2000/01, Top 30 city pairs based on passengers uplifted and discharged within flight," found at www.btre.gov.au/avstats/docs/tab1_06.xls.

**Table 6. Major international airline city pairs, 1999/00 and 2000/01
Top 30 city pairs based on passengers uplifted and discharged**

City Pair (a)	Passengers	Freight (tonnes)	Freight kg/pax
	2000/01	2000/01	2000/01
Hong Kong - Melbourne	270,329	25,729	95.18
Singapore - Melbourne	619,443	47,767	77.11
Kuala Lumpur - Melbourne	207,089	14,534	70.18
Seoul - Sydney	293,259	18,663	63.64
Auckland - Melbourne	491,602	29,035	59.06
Singapore - Sydney	927,436	47,268	50.97
Hong Kong - Sydney	670,055	33,425	49.88
Singapore - Brisbane	369,577	18,361	49.68
Auckland - Sydney	1,009,428	50,134	49.67
Singapore - Perth	652,244	29,773	45.65
Bangkok - Melbourne	218,457	8,993	41.16
Los Angeles - Melbourne	289,977	11,131	38.38 B767-338ER
Tokyo - Brisbane	236,105	9,019	38.20
Los Angeles - Sydney	824,361	29,621	35.93 B737-800
Christchurch - Melbourne	170,803	5,653	33.10
Auckland - Brisbane	497,610	14,874	29.89 B747-438ER
Osaka - Brisbane	198,344	5,720	28.84
Kuala Lumpur - Perth	237,547	6,457	27.18
Tokyo - Sydney	414,094	11,138	26.90
Kuala Lumpur - Sydney	277,624	7,343	26.45
Osaka - Sydney	280,172	6,996	24.97
London - Sydney	368,538	8,608	23.36
Christchurch - Brisbane	180,656	3,816	21.12 B737-476
San Francisco - Sydney	185,875	3,711	19.96
Bangkok - Sydney	436,802	8,291	18.98
Christchurch - Sydney	397,986	7,427	18.66
Denpasar - Sydney	219,666	3,759	17.11
Tokyo - Cairns	235,125	981	4.17
Wellington - Sydney	229,987	859	3.73
Denpasar - Perth	198,521	652	3.28
Total of top 30 city pairs	11,608,712	469,736	40.46
All other city pairs	5,517,792	195,949	35.51
Industry total	17,126,504	665,685	38.87
Percentage of top 30 city pairs	67.8	70.6	

(a) Covers traffic in both directions of the city pair.

(b) Ranking based on passenger movements in 2000/01.

12.30 This table shows that there are many important markets in which the average ratio of air cargo to air passengers is significantly greater than the ideal ratio for even the B767. Significantly, these city pairs include two Tasman routes: Auckland – Sydney, and Auckland – Melbourne. If these markets were not served by freighters, flights would need to operate at passenger load factors of 64% for B767s and nearly 50% for B747s in order to provide sufficient freight capacity. Obviously the passenger contribution under those low load factors would not be sufficiently strong to

make bellyhold freight inexpensive. The situation is as bad or worse for flights to Hong Kong, Singapore, Seoul, and Kuala Lumpur.

12.31 In order to evaluate the relative economics of belly hold and freighters in more rigour, the Applicants consider next some actual flight cost and revenue data provided by Air New Zealand for the Tasman routes for the 2001 year. The Applicants have identified passenger-specific costs, such as ticket selling costs, marketing, inflight services, inflight meals, etc, and deducted them from actual passenger revenues to obtain a passenger contribution for all Tasman flights using a particular aircraft type. The passenger contribution is compared to the belly hold freight contribution for the flight.

12.32 The contribution to flight costs from all revenue sources for passenger flights is compared to an estimate of the freight only contribution to the same flight costs on the assumption that the same aircraft type were configured instead as a pure freighter. The ratios of freighter-configuration cargo capacity to belly hold-configuration cargo capacity for each aircraft type were obtained from the Boeing and Qantas web sites, which contain the relevant capacity information.¹⁹ The Applicants assume that the net freight contribution varies linearly with the quantity of freight on the flight. To the extent there are any fixed costs per flight of loading freight, then this estimate will tend to be conservative.

12.33 All data in the table below is sourced from confidential Air New Zealand revenue and cost data for its Tasman operations in FY2001. For reasons of confidentiality, figures are expressed in terms percentages of passenger revenues.

	Tasman 744 FY01	Tasman 763 FY01	Tasman 733 FY01	Tasman 767 FY01
All passenger revenue	100.0%	100.0%	100.0%	100.0%
Passenger-specific expenses	37.7%	41.7%	41.2%	39.7%
Net passenger contribution	62.3%	58.3%	58.8%	60.3%
Net freight contribution (NFC)	7.2%	9.4%	2.2%	7.0%
Ratio "R" of freighter capacity to belly hold capacity for aircraft type	10.37	6.22	9.39	6.22
Est. freighter net contribution: NFC X "R"	75.1%	58.7%	20.3%	43.6%
Sum of pax and bellyhold contributions	69.5%	67.7%	61.0%	67.3%
Ratio of freighter contribution to belly hold	1.08	0.87	0.33	0.65

12.34 There is one column for each of the main aircraft types flown by Air New Zealand on the Tasman routes in FY01: B747-400, B767-300, B737-300, and B767-700. Costs and contributions to fixed cost are expressed as percentages of the passenger ticket sales revenue for that aircraft type.

12.35 Passenger-specific expenses, such as ticket selling costs, cost of meals, of cabin crew, etc. are deducted from the gross passenger revenue to obtain a net passenger contribution to fixed costs and profit. There is a separate

¹⁹ See http://www.qantas.com.au/info/flying/inTheAir/ourAircraft/our_aircraft , and <http://www.boeing.com/commercial/flash.html> .

line for the net freight contribution on each type of aircraft, again expressed as a percentage of the gross passenger ticket revenue.

- 12.36 Each aircraft type has its own characteristic ratio of freight capacity when configured as a dedicated freighter (of type B747, B767, or B737) to belly hold freight capacity when configured as a passenger aircraft. This ratio is more than 10 in the case of a B747, which means that a B747 freighter has more than 10 times the cargo capacity of a B747 passenger aircraft. This ratio is more than 9 in the case of a B737, and somewhat more than 6 for a B767.
- 12.37 We calculate an estimated cargo contribution for a dedicated freighter of each aircraft type by multiplying the belly hold cargo contribution by this characteristic ratio. In essence we calculate what revenue contribution cargo would make if there were 10 times as much of it (or 6 times in the case of a B767) and it attracted the same cargo price. This all-freight contribution is then compared to the actual sum of net passenger contribution and belly hold cargo contribution for the aircraft type. This comparison tells us whether the net revenue contribution of a dedicated freighter flight would be greater, less than, or equal to the net revenue contribution of a mixed passenger and cargo flight.
- 12.38 As this table clearly shows, on Air New Zealand's actual 2001 Tasman operating revenues and expenses, a pure B747 freighter would actually have earned a superior contribution to the flight common costs than a B747 passenger flight carrying belly hold freight.²⁰ The economics of a dedicated B767-300 freighter are not significantly worse than for a B767-300 passenger service carrying belly hold freight. These numbers certainly do not support a conclusion that "*the operating costs of providing dedicated freighter services are much higher than the costs of providing belly hold,*" as asserted by the Commission.²¹ The Commission's conclusion would only hold in the case of the B737-300, shown in the second last column of the table above. The problem, however, with using B737s to transport belly hold freight is that the small cargo space makes it infeasible to carry palletised freight, and consequently the cost of loading and unloading negates the passenger contribution benefit.
- 12.39 The foregoing analysis rebuts the principal arguments put by the Commission to support its conclusion that supply side substitution between freighters and belly hold is weak. That argument rested almost entirely on the assumptions that belly hold freight is much less costly to carry than dedicated airfreight, and that belly hold cargo is price differentiated from comparable dedicated freighter cargo.
- 12.40 Apart from pricing and marginal costs, the Commission also cited freighter route networks and flight frequencies as factors impinging on substitution. The route network argument appears to be that as freighters tend to operate on circular routes, unlike the back and forth flight patterns operated by passenger services, freight customers may face some difficulty in getting their freight to the intended destination in an acceptably short span of time. The flight frequency argument appears to be that freighter services are not sufficiently frequent to provide adequate levels of service for time-sensitive freight.

²⁰ Air New Zealand does make use of some dedicated freighter capacity on its AKL-MEL route in association with Lufthansa.

²¹ NZCC, op.cit. para 199.

12.41 An examination of the current range of pure freighter services which operate between Sydney or Melbourne and Auckland shows these concerns to be misplaced with respect to the Tasman market. Current dedicated freighter services include:

- Singapore Airlines runs a freighter service weekly on a SIN/SYD/AKL/SIN route and another weekly service on SIN/SYD/AKL/PER/SIN;
- Cargolux (freighter-only airline) runs twice weekly: MEL/AKL/LAX, and MEL/AKL/HKG;
- DHL operates five times weekly AKL/SYD/AKL.

12.42 Without considering any of the other participants in the Tasman freight market (such as Air New Zealand which is associated with Lufthansa which runs dedicated freighters westbound, and Qantas, which is flying B767's "back of the clock" four nights a week carrying only freight) these three airlines alone provide nine dedicated freighters per week eastbound, and five per week westbound. The fact that different airlines might provide the eastbound and westbound services is no practical impediment to the use of freighters by freight forwarders.

12.43 If any further evidence of the supply-side substitution threat between belly hold and dedicated freighter was needed, Boeing's 737-700 Convertible provides it. Boeing describes this aircraft in the following terms:

"The 737-700C (Convertible) is the first member of the Boeing Next-Generation 737 family to be offered in both an all-passenger and all-cargo layout. ... The 737-700C, also available with a Quick Change option, allows airlines to alternate between passenger and cargo layouts on a daily, weekly or seasonal basis depending on market requirements. The 737-700 Convertible with the Quick Change option incorporates palletised seating to enable the airplane to be converted from passenger to freighter and freighter to passenger configurations in less than one hour."²²

12.44 This aircraft was launched in September 1997. This development demonstrates the ease with which dedicated freighter capacity can be brought into a market in response to pricing signals. Aircraft, by their very nature, are a fungible, transportable resource. Competitive entry in response to price signals does not require the creation of new firms, or even the creation of new resources. Many of the passenger airlines in the South Pacific region, such as Singapore Airlines and Malaysia Airline Systems operate fleets containing a mixture of passenger and freighter aircraft.²³ New aircraft types, such as the B737-700C described above, make it possible to reconfigure a single aircraft from passenger to freighter service within one hour.

Conclusion on market definition

12.45 The Commission concluded that belly hold freight is in a separate market to air cargo carried on dedicated freighter aircraft. They cited weakness in both demand side and supply side substitutability. The perception that

²² www.boeing.com/commercial/737family/pf/pf_ng_convertible.html

²³ Singapore Airlines operates 12 B747-400F "Mega Ark" freighters. MASkargo operates B747-200F and B747-200LF freighter aircraft. Lufthansa operates a fleet of MD11 and B747 freighters.

demand side substitutability is weak was based principally on the incorrect assumption that air freight pricing is different for belly hold and freighters. The Applicants have demonstrated in the preceding sections the incorrectness of that assumption and of the conclusions which flow from it.

12.46 The perception that supply side substitutability is weak was based to a large extent on the assumption that air cargo costs are much higher for freighters than for belly hold. The Applicants have demonstrated in the preceding sections that this assumption is generally only valid in very special circumstances which do not apply to the Tasman or International markets. The principal freight city pairs exhibit ratios of cargo to passenger volumes which significantly exceed the ratios of cargo to passenger capacity on the aircraft flying the routes—necessitating the use of dedicated freighters for reasons of cost minimisation. Furthermore the Applicants have analysed commercial data for Air New Zealand's Tasman operations to establish that actual passenger and freight contributions on the wide body aircraft flown on those routes make the economics of belly hold and freighters approximately equal.

12.47 Other claimed reasons for lack of supply side substitutability include network routings and schedule frequencies. The Applicants have shown that there is sufficiently frequent dedicated freighter service on the Tasman in each direction to overcome this concern.

12.48 In conclusion, the Applicants note that there is every reason to believe that freighters and belly hold are close substitutes for air cargo service: the nature of the service is virtually identical. The reasons for doubting the vigour of freighter – belly hold competition which were put forward by third party submitters and accepted by the Commission are highly counterintuitive and incorrect. Vigorous rivalry between passenger and cargo airlines for freight traffic is occurring now. Cargo airlines in particular have great flexibility to redeploy their fleets to take advantage of pricing opportunities. Developments such as the B737-700 C Convertible will give airlines even greater flexibility in future to exploit short term opportunities by substituting freighters for belly hold capacity. Belly hold and dedicated freighters are therefore in the same market for the Tasman and for the International market.

Tasman air freight market

12.49 The Commerce Commission's preliminary view is that "the proposed Alliance would have or would be likely to have the effect of substantially lessening competition in the Tasman belly hold freight market when compared with the counterfactual."²⁴

12.50 At the outset the Applicants note that this preliminary conclusion has been coloured to some extent by the Commission's definition of a Tasman belly hold only airfreight market. The prior section clearly demonstrates that this market definition is inappropriate as it was founded on a number of incorrect assumptions.²⁵

²⁴ NZCC, para. 556.

²⁵ The Applicants also note that the Tasman freight market could be broad enough to include sea freight, as it is served by substantial maritime capacity. Tasman sea freight takes 3-4 days transit time, and provides a pricing constraint for all but the most time critical air freight. These comparatively short sea transit times make it feasible to ship even perishable products given the latest "reefer" (refrigerated freight container) technology. Notwithstanding this observation, the remainder of the Applicants' conservative analysis of the Tasman

12.51 The table below provides an indication of the Tasman air freight market shares which prevailed at December 2001.

**Freight Carried on Tasman Route
Cargo Tonnes
12 Months to December 2001**

Operator	Both			Both			Passenger/Freighter
	Aust - N.Z.	N.Z. - Aust	directions	Aust - N.Z.	N.Z. - Aust	directions	
Qantas	32%	34%	33%	19,528.3	17,879.7	37,408.0	P
Aerolineas	0%	1%	0%	75.7	371.0	446.7	P
Air China	0%	0%	0%	116.1	1.5	117.6	P
Air New Zealand	36%	43%	39%	21,872.3	22,468.6	44,340.9	P
China Airlines	3%	1%	2%	1,912.8	707.8	2,620.6	P
Garuda	0%	1%	1%	110.1	508.2	618.3	P
Polynesian	0%	0%	0%	21.0	1.6	22.6	P
Singapore	3%	0%	2%	1,734.7		1,734.7	F
Thai International	8%	6%	7%	4,640.4	3,278.3	7,918.7	P
United	3%	2%	2%	1,544.4	1,221.6	2,766.0	P
Asian Express Airlines	7%	7%	7%	4,019.7	3,582.4	7,602.1	F
Cargolux	11%	0%	6%	6,357.7		6,357.7	F
Evergreen	0%	1%	1%		593.3	593.3	F
Lufthansa	0%	4%	2%			2,200.6	F
Total				60,198.5	52,814.6	113,013.1	

Source: Bureau of Transport & Regional Economics (BTRE)

	Aust - N.Z.	N.Z. - Aust	Total
Passenger operators	82.8%	87.9%	85.2%
Freighters	17.2%	12.1%	14.8%
QF-NZ alliance share	69%	76%	72%

12.52 Several points should be borne in mind when interpreting this table. First, since this data was compiled, United exited the Tasman freight market in 2002, and DHL has entered, with five return AKL/SYD/AKL B727 freighter services per week. Second, the Singapore Airlines service listed in this table is a freighter service, notwithstanding the fact that Singapore Airlines is better known as a passenger airline.

12.53 If the alliance took place without any other changes from the market structure indicated above, then it would have had a 71% market share. However, the SLC test must compare the state of competition with the alliance against the most likely counterfactual. The market structure indicated above is not an appropriate counterfactual, as the market has changed already, and will continue to change. The Applicants have seen the departure of a significant belly hold freight operator (United), and the entry of a significant dedicated freight airline (DHL) since December 2001. Developments of this sort demonstrate the flexibility with which dedicated freighter airlines can redeploy resources in order to capitalise on market opportunities which might be created by any attempt by some players to increase prices or reduce the quantity or quality of service offerings. In addition, there are virtually no regulatory barriers for freighter entry or expansion, other than those associated with safety considerations.

12.54 Air New Zealand has publicly announced its intention to use A320s to fly its Tasman routes, whether or not the alliance with Qantas goes ahead. This strategic decision has important implications for the amount of belly hold cargo capacity Air New Zealand will provide on the Tasman route, and this

Market considers an air-freight only market in which belly hold and dedicated freighters are strong substitutes.

reduction in belly hold capacity has important implications for the with-and-without-alliance market share comparison.

12.55 Prior to its announced A320 strategy, Air New Zealand flew a combination of B747, B767, and B737 passenger aircraft on the Tasman route. The A320 is a narrow-body aircraft type with a belly hold cargo capacity of approximately 3 tonnes.²⁶ The ratio of belly hold cargo capacity (kg) to passenger capacity on an A320 is 21, similar to that of a B737-476, and substantially less than for a B767-300, which has a ratio of 38. Clearly the replacement of B767 and B747s on the Tasman route with A320s will result in a substantial reduction in Air New Zealand's belly hold cargo capacity, assuming that approximately the same number of passengers is carried.

12.56 Further, exacerbating the loss of effective freight capacity under the A320 strategy is the fact that the loading and unloading of belly hold cargo for narrow-bodied aircraft, such as the A320 and B737, can be logistically awkward and introduces additional costs. The awkwardness and extra cost arises for B737 series aircraft from the difficulty in loading cargo into their small belly hold spaces, requiring all freight and baggage to be loose loaded. While the A320 cargo can be equipped for containerisation, the different sized containers relative to wide-body aircraft present a logistical problem for connecting cargo. The additional cost arises for A320s because the containers which must be used are a unique size and require specialised loading equipment at the aircraft side. Players in the Tasman freight value chain have become accustomed to using wide-body aircraft containers. Agents and wholesalers are comfortable with this equipment type. Given the need for interoperability with wide body cargo equipment on routes connecting to the Tasman, the desirability of a new, smaller container will be small within the forwarding community.

12.57 As a result of these problems, the cargo load factors for narrow bodies tends to be significantly lower than for wide bodies. For example, the freight load factors for Qantas' trans-Tasman operations by aircraft in the 12 months to June 2002 were as follows:²⁷

- Boeing 737 – []
- Boeing 767 – []
- Boeing 747 – []

12.58 Taking account of these various belly hold cargo disbenefits, Air New Zealand expects that its A320 strategy will lead to a reduction in its Tasman cargo market share by a factor of between 3 and 6.²⁸ If the conservative figure of 3 were used, then the proper comparison of Tasman cargo market concentration with and without the alliance would be approximately as shown in the table below.

²⁶ See <http://www.swiss.com/index/sw-oc-fl-airbus-a320.htm>

²⁷ Data provided confidentially by Qantas.

²⁸ Source: confidential Air New Zealand strategy documents.

Freight Carried on Tasman Route							
Cargo Tonnes	NZ reduction factor =					3	
Post Air NZ A320 strategy							
	Cargo Tonnes			Cargo Tonnes			
Operator	Aust - N.Z.	N.Z. - Aust	Both directions	Aust - N.Z.	N.Z. - Aust	Both directions	
Qantas	41%	47%	44%	19,528.3	17,879.7	37,408.0	
Aerolineas	0%	1%	1%	75.7	371.0	446.7	
Air China	0%	0%	0%	116.1	1.5	117.6	
Air New Zealand	15%	20%	17%	7,290.8	7,489.5	14,780.3	
China Airlines	4%	2%	3%	1,912.8	707.8	2,620.6	
Garuda	0%	1%	1%	110.1	508.2	618.3	
Polynesian	0%	0%	0%	21.0	1.6	22.6	
Singapore	4%	0%	2%	1,734.7	-	1,734.7	
Thai International	10%	9%	9%	4,640.4	3,278.3	7,918.7	
United	3%	3%	3%	1,544.4	1,221.6	2,766.0	
Asian Express Airlines	8%	9%	9%	4,019.7	3,582.4	7,602.1	
Cargolux	13%	0%	7%	6,357.7	-	6,357.7	
Evergreen	0%	2%	1%	-	593.3	593.3	
Lufthansa	0%	6%	3%	-	2,200.6	2,200.6	
Total				47,351.7	37,835.5	85,187.2	
QF-NZ alliance share	57%	67%	61%				

12.59 Note that the tonnages in the above table are the same as in the prior table.

While it seems likely that the existing carriers would expand to fill the gap created by Air New Zealand's A320 strategy, it is not known how much of that capacity would be taken up by each airline. Therefore, this assessment is necessarily approximate, as it effectively assumes that the capacity vacuum created by the A320 strategy would be filled by the remaining players in proportion to their 2001 market shares. Also, the competitive responses of other players, notably the dedicated freighter airlines, is unknown, and will depend upon such factors as the alliance's cargo pricing strategies. Data availability constraints have forced us to base this analysis on the BTRE data cited earlier in this section, notwithstanding the facts already noted about the exit of United and the entry of DHL.

12.60 Nevertheless, this analysis shows that the cargo market share of the alliance on the Tasman could be 61%, compared to a counterfactual cargo market share for Qantas of 44%. Given the demonstrated flexibility of dedicated freight airlines to respond to market opportunities, it seems very unlikely that such a modest (17%) increase in concentration would lead to a substantial lessening of competition.

12.61 The current dynamism of dedicated freighter airlines on the Tasman is demonstrated by figures published in the ACCC draft determination. Between 1999 and 2002, the combined market share of Qantas and Air New Zealand has decreased by 11%, despite the reductions in United Airlines services. The bulk of the market share gains have been to dedicated freight airlines, which increased their combined share of the Tasman air cargo market in the four years from 5.6% to 14.4%.²⁹

12.62 Emirates Air's imminent entry to the Tasman market is reported in the press. According to the New Zealand Herald³⁰ the airline will introduce

²⁹ Data contained in table 9.3, p. 90, of the ACCC Draft Determination on the proposed Qantas-Air New Zealand alliance, dated 10 April 2003.

³⁰ "Emirates Air to enter trans-Tasman market in August", the New Zealand Herald, Tuesday 10 June 2003.

daily flights between Auckland and Sydney, and between Auckland and Melbourne. A third daily flight, from Auckland to Brisbane, will be introduced on October 26. An Emirates spokesman is quoted as hoping the service would improve the flow of people, goods and services between New Zealand and the Middle East and Africa. According to the Emirates web site, they plan to use B777-300 aircraft, which have a cargo capacity of between 17 and 20 tonnes. The resulting cargo capacity to be introduced to the Tasman market by Emirates from August 1, 2003 amounts to 21.9% of the cargo carried on that route in Calendar 2001. The cargo capacity after the October 26, 2003 introduction of Brisbane – Auckland services would amount to more than 32% of the cargo carried on that route in Calendar 2001.³¹

12.63 Emirates' entry with substantial new capacity highlights the fact that barriers to entry in the Tasman passenger market are surmountable. There are no barriers to entry for dedicated freighters in the Tasman market. At present Qantas reports that there is a large surplus of cheap DC10 and B727 freighter aircraft available to intending freighter entrants.

12.64 These developments: the increase in dedicated freighter market share, and the entry of a new passenger carrier intending also to carry cargo, underline the dynamic nature of competition on the Tasman route, and reinforce the point that entry barriers to the Tasman air cargo market are low. Given these demonstrated facts, it would be unreasonable to conclude that the alliance, with its relatively small concentrating effect (in the factual as compared with the counterfactual case), would substantially lessen competition in this market.

International air freight markets

12.65 The Commerce Commission's preliminary view is that in the NZ-Pacific and NZ-US markets "there would be or likely to be a substantial lessening of competition in those markets. Although the Commission found that the proposed Alliance would be constrained in the international market, the Commission is of the preliminary view that the overall effect of the proposed Alliance would have or would be likely to have the effect of substantially lessening competition in the international belly hold freight market when compared with the counterfactual."³²

12.66 Before embarking on the analysis of competition in NZ – International air freight markets, it is necessary to stress two points:

- The relevant market includes both belly hold and dedicated freighter capacity (as argued in an earlier section of this analysis); and
- Ready supply side substitutability links all the city pairs in the NZ – International arena into a single freight market. This position has been accepted by the Commission through its characterisation of the geographic scope of freight markets.³³

³¹ See www.emirates.com.

³² NZCC, para. 556.

³³ NZCC, para. 204.

12.67 The Applicants begin by assessing the state of competition on city pairs between NZL and the largest Asian destination. The alliance would result in the following pattern of belly hold cargo market shares.³⁴

Route	NZ	CX	SQ	QF	Others	NZ+QF
NZ-Hong Kong	26	30	17	17	10	43
NZ-Japan	35	15	15	30	5	65
NZ-Singapore	50	0	40	5	5	55
NZ-Taiwan	26	10	10	0	54	26
Hong Kong-NZ	44	25	15	10	6	54
Japan-NZ	49	15	15	15	6	64
Singapore-NZ	50	0	40	5	5	55
Taiwan-NZ	26	10	10	0	54	26

12.68 However, dedicated freighter airlines are active in the South Pacific region, so these estimates, which do not include dedicated freighter airlines, overstate the market share of the alliance. Comprehensive cargo market share data is available for international city pairs to and from Australia. While there are some differences from the demand side, there is strong supply side substitutability between Australian and New Zealand international freight markets, at least from the standpoint of dedicated freighter capacity. Thus the table below, which summarises calendar year 2001 quantities of freight uplifted between Australia and international destinations by carrier, provides a meaningful indicator of the extent of cargo capacity which could be brought to bear on New Zealand international freight markets in the event that any player attempted to increase prices.³⁵

³⁴ Market share estimates provided by Air New Zealand.

³⁵ Data compiled from the Australian Department of Transport and Regional Services. Note: Statistics show uplift/discharge data within a flight number. Therefore because flight numbers typically change at an airline's home port, operators' U/D data for their home port is likely to be overstated by traffic whose O/D point is beyond that port.

Freight tonnes on Scheduled International Air Services - 2001CY

Scheduled Operators	Asia	Europe	New Zealand	USA	All Others	Grand total
Qantas Airways	78,537	14,224	37,408	14,524	7,065	151,758
Singapore Airlines	97,442	-	1,882	-	-	99,325
Air New Zealand	-	-	44,341	4,634	-	48,975
Cathay Pacific Airways	47,717	-	-	-	-	47,717
Malaysia Airlines	33,531	-	-	-	-	33,531
Thai Airways International	17,276	-	7,919	-	-	25,194
Federal Express Corporation	-	-	-	13,104	10,163	23,267
Japan Airlines	21,165	-	-	-	-	21,165
Emirates	6,155	-	-	-	9,340	15,495
Korean Air	15,008	-	-	-	-	15,008
British Airways	8,604	5,825	-	-	-	14,429
United Airlines	-	-	2,765	10,094	1	12,860
Ansett International	11,173	-	-	-	444	11,618
Cargolux Airlines Intl	531	4,131	6,358	-	-	11,020
Others	23,215	12,456	13,773	25,109	34,186	108,739
Grand Total	337,140	36,637	114,446	67,465	61,199	640,102
QF + NZ	78,537	14,224	81,749	19,158	7,065	200,733
QF/Total	23%	39%	33%	22%	12%	24%
NZ/Total	0%	0%	39%	7%	0%	8%
(QF+NZ)/Total	23%	39%	71%	28%	12%	31%

12.69 This table demonstrates two relevant facts. First, in none of the Australia to/from international country pairs is the alliance likely to hold a combined market share of more than 40%, except for the Tasman, which was discussed in the prior section of this analysis. Second, for international markets to and from Australia generally, the alliance would hold no more than a 31% market share.

12.70 As this table is based on uplift/discharge data, it tends to exclude freight which is carried between origin and destination on indirect routings. The fact is that a great deal of air freight is carried on indirect routings. For example, Air New Zealand estimates that more than [] of the cargo that it transports from LAX – AKL is ultimately bound for Australia via a second uplift/discharge across the Tasman. The tonnages of such freight would appear in the table above as Tasman freight whereas it is actually USA – Australia freight. Similarly, Air New Zealand estimates that [] of the Hong Kong – North America air cargo is hubbed in New Zealand, as is [] of the Taiwan – North America air cargo. Given these facts, the market shares cited in the table above are likely to be overestimates because they overlook the many indirect routings served by a wide variety of international air freight providers.

12.71 Sixth freedom freighter operators have many opportunities to compete with Qantas and Air New Zealand by transiting freight through efficient hubs, such as Singapore. Unlike passengers, freight can readily travel on indirect routings without any commercial disadvantage.

12.72 With regard to the AKL – LAX route, Air New Zealand estimates that approximately [] of traffic in the LAX – AKL direction is routed indirectly across Asian hubs. This fact, combined with the fact that more than [] of

the LAX – AKL freight carried by Air New Zealand is transshipped to Australia, implies that Air New Zealand's share of the LAX – AKL freight market is greatly overstated by uplift/discharge data for direct flights. In the case of the AKL – LAX direction, the cargo is primarily perishable. For this type of cargo there are many substitute points of origin which can displace AKL in the event that the alliance failed to remain price competitive.

12.73 The dedicated freighter capacity which countervails the market power of Qantas and Air New Zealand in the Australian international markets is virtually all available to be redeployed to the New Zealand international markets in the event that the alliance, or any other player, were to attempt to raise prices or reduce the quantity of cargo service available. Given these facts, it is clear that the New Zealand international air freight markets would not suffer from any substantial lessening of competition with the alliance.