



Kotahi: Response to the Commerce Commission's Draft Determination Chapman Tripp

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Project Team

James Mellsop

Kevin Counsell

NERA Economic Consulting
Level 8, PWC Tower
113-119 The Terrace
PO Box 699
Wellington 6140
Tel: +64 4 819 2550
Fax: +64 4 819 2552
www.nera.com

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1 Introduction and Summary

The Commerce Commission has released its draft determination, dated 16 December 2011, regarding Fonterra's application for the authorization of the arrangements involving Kotahi Logistics LP (Kotahi). In this report we set out our comments on the Commission's draft determination. Confidential information in this report is identified by square brackets and shading:

- **Yellow** shading is confidential information taken from the Commission's draft determination (or information that would allow parties to back-out the Commission's confidential data); and
- **Green** shading is information confidential to Kotahi.

In summary, we agree with the Commission's conclusion that Kotahi would not substantially lessen competition in any market, and that Kotahi would not result in any material detriments. However, we disagree with the Commission's assessment that there would be no efficiency benefits arising from Kotahi beyond Kotahi's ability to exercise countervailing power against International Container Lines (ICLs). The evidence suggests that Kotahi would result in a broader set of benefits. In particular:

- Economic principles and evidence show that aggregation and coordination of transport demand results in efficiencies;
- While efficiencies can result even for relatively small levels of aggregation, the scale of transport aggregation arising from Kotahi is well beyond anything currently observed in New Zealand; and
- Kotahi's aggregation and coordination of container volumes at a small number of ports would be an important catalyst for larger ships to service New Zealand, which at least would bring forward net benefits to New Zealand both with and without port investment.

The Commission has placed most emphasis on the aggregation role of Kotahi, but in our view has not placed sufficient weight on Kotahi's coordination and risk management roles. It is not just the aggregation of container volumes (which will be significant), but also the broader roles of Kotahi, that would result in a richer set of benefits to New Zealand than the Commission has placed weight on.

2 Commission's Competition Analysis

Whether or not the deeming provisions of the Commerce Act apply, we agree with the Commission's conclusion (at ¶241) that Kotahi would not substantially lessen competition in any market, and that Kotahi would not result in any material detriments. These conclusions are consistent with the findings in our 8 September 2011 report.

Our only comment on the Commission's competition analysis is in relation to its discussion of the "waterbed effect" – see ¶227-231 of the draft determination. The Commission is correct to reject the waterbed effect. The theory that a waterbed effect can occur because

suppliers look to recoup lost profits by increasing prices to less powerful buyers has been rejected in the literature,¹ and the Commission has (correctly) dismissed this argument.

While there may be other mechanisms through which a waterbed effect could, in theory, occur, we are not aware of any evidence to suggest that these mechanisms would occur in the case of Kotahi. Moreover, the literature shows that in some circumstances waterbed effects can be efficiency enhancing,² and that “anti-waterbed effects” can occur (where smaller buyers also receive lower prices).³ We have also made the point in our 8 September 2011 report (see footnote 34 of that report) that if rivals of Kotahi partners face higher freight charges, they always have the option of using Kotahi’s services as customers.

In short, the existence of a waterbed effect in the present case is too speculative for the Commission to place any weight on it.

3 Commission’s Benefits Analysis

3.1 Overview

The Commission’s preliminary view is that the only benefit of Kotahi would be the potential for Kotahi to exercise countervailing power over ICLs. The Commission has rejected Fonterra’s claim that there would be benefits arising from efficiencies in intermodal freight (¶249), better connectivity to markets, including accelerating the arrival of larger ships (¶273), reduced shipping costs (¶284), reduced carbon emissions (¶295) and avoided inefficient infrastructure spend (¶305).

We agree with the Commission that any increase in countervailing power over ICLs would be a benefit to New Zealand – see page 14 of our 8 September 2011 report. However, we believe that the Commission should place weight on a broader set of benefits than only the countervailing power benefit. As we noted in our 8 September 2011 report, by coordinating and aggregating demand for container transport services, Kotahi would:

- Increase the efficiency of ocean and domestic container freight; and
- Bring forward the introduction of larger ships (with lower average costs per container) to New Zealand.⁴

We note that Fonterra and Silver Fern Farms have incurred the transaction costs of forming Kotahi for a reason, which (as the Commission agrees) is not an anticompetitive one. Therefore, the parties to Kotahi must anticipate some efficiency benefits. Indeed, we

¹ See, for example, Paul W. Dobson and Roman Inderst (2008), “The Waterbed Effect: Where Buying and Selling Power Come Together”, *Wisconsin Law Review*, 331-357.

² See Roman Inderst and Tommaso M. Valletti (2011), “Buyer Power and the ‘Waterbed Effect’”, *Journal of Industrial Economics*, 59(1), 1-20.

³ See Dobson and Inderst, *op cit*, and Ozlem Befre-Defolie and Greg Shaffer (2011), “Countervailing Power Hypothesis and Waterbed Effects”, paper presented to the Twelfth CEPR/JIE Conference on Applied Industrial Organization, Tel Aviv, 24-27 May.

⁴ We note the Commission accepted that the bringing forward of the development of a gas field was a public benefit, in *Decision 505*.

reviewed Kotahi's business model in our 12 October 2011 memo, and we noted that the primary expected driver of Kotahi's revenue will be earning a margin through more efficient matching of supply and demand.

The Commission's conclusion is that there are no such efficiency benefits. However in our view, for the reasons we now set out, the evidence shows that Kotahi would in fact result in the efficiency benefits that the Commission has rejected. As we also note below, the Commission's conclusion is inconsistent with the preliminary views of the New Zealand Productivity Commission in its recent draft report on International Freight Transport Services, and the findings regarding the introduction of larger ships in the New Zealand Shippers' Council's "Bigger Ships" report.

3.2 The Extent of Aggregation

The Commission frequently refers to the aggregation of container volumes between the counterfactual and factual as not being large enough to justify the claimed efficiency benefits of Kotahi – see ¶263.1 regarding intermodal freight cost savings, ¶270 regarding benefits from consolidation of freight through interchange facilities, and ¶294 regarding reduced shipping costs.

In our view this is not correct:

- It is clear from economic principle and evidence that aggregation and coordination of transport demand results in efficiencies;
- The evidence suggests that such efficiencies occur with even relatively small levels of aggregation and coordination; and
- On the Commission's own evidence, Kotahi would have a share of between 29% and 38% of annual TEUs exported in the factual, compared to between []% and []% in the counterfactual, i.e., the extent of aggregation is between []% and []% of annual TEUs exported. Putting this into volumes, the extent of aggregation is [] TEUs exported – a volume that is larger than the exports of [⁵], and over ten times larger than the estimated exports of [⁶]. The scale of container transport coordination in the factual is well beyond anything currently observed in New Zealand, [⁷] and this sheer scale means that Kotahi (under the factual) would create further transport efficiencies.

We expand on these points below.

3.2.1 Economic Principle and Evidence

It is clear from economic principle that improved matching of variable transport demand with lumpy supply will result in efficiencies. We discussed the relevant literature in our 8 September 2011 and 18 October 2011 reports. In summary:

⁵ []

⁶ []

⁷ []

- Transport supply is characterized by lumpy capacity, while demand can be atomistic, volatile and seasonal;
- As a result, significant efficiencies can be achieved by improving coordination of capacity with demand, including through horizontal collaboration between shippers; and
- As noted in our earlier reports, there are both real-world case studies and simulation models showing cost reductions and other efficiencies arising from transport collaborations.

The New Zealand Productivity Commission's recent draft report on International Freight Transport Services⁸ also recognizes these economic principles. It notes (at section 5.2, pp.69-70) that coordination can improve the efficiency of the transport supply chain:

Competition is one important means of achieving efficient freight transport services, but coordination is equally important because the efficiency of one component of the supply chain often depends on the efficiency of other components.

The Productivity Commission goes on to refer to improvements in coordination that can come from (among other things) combining freight shipments and reducing the costs of empty shipping containers, both of which are features of Kotahi's proposal. For example, the Productivity Commission states (at p.70) that:

The combination of freight shipments by exporters or importers often enables them to reduce their unit freight costs by increasing the utilisation of container space and increasing the bargaining power of exporters and importers with respect to shipping lines and airlines.

The existence of freight forwarders and ocean carriage operating agreements also supports this proposition. As we noted in our 8 September 2011 report, these market mechanisms already carry out the role of aggregating and coordinating freight demand and supply. Their existence suggests that aggregation and coordination of freight generates positive efficiency benefits that can be passed on to the users of these services. The Productivity Commission's report makes a similar point (see page 70). In addition, as already noted above, Fonterra and Silver Fern Farms have invested in Kotahi, and in doing so must anticipate some efficiency benefits from the optimization of container demand and supply.

As we also noted in our 8 September 2011 report (page 10), the benefit that Kotahi would add to the existing coordinating mechanisms is scale on the demand-side. It is implausible that the ICLs have managed to extract all possible coordination benefits, as they appear to claim – see ¶289 and ¶290 of the draft determination.

3.2.2 Level of Aggregation for Efficiencies

Some of the transport cost studies that we referred to in our 8 September 2011 report indicate that efficiencies can arise even for very small levels of aggregation. In particular:

⁸ New Zealand Productivity Commission (2012), "International Freight Transport Services", Draft Report, January 2012.

- Cruijssen and Salomon (2004)⁹ estimate cost savings from transport collaboration using a simulation model. With collaboration between three transport companies each with equal market share (of 33%), cost savings are 12%. But even with one party having a market share of 98% and the two other parties each having 1% shares (i.e., the level of aggregation is only 2%), cost savings of approximately 7.5% are achieved; and
- In a paper presented at the “2010 Horizontal Collaboration in the Supply Chain Summit”, Jacques Poulet discusses transport collaboration between Nestlé and Yoplait in France.¹⁰ Each party has 10% market share, and while this appears to be share in the output market, rather than the transport market, it still suggests the level of aggregation in transport would be relatively low. Despite this, the collaboration still resulted in a 13% transport cost reduction for Nestlé.

This evidence suggests that efficiency benefits are likely to arise with Kotahi’s control of between 29% and 38% of annual TEUs exported in the factual, compared to between []% and []% in the counterfactual, i.e., the extent of aggregation of between []% and []% of annual TEUs exported.¹¹

Moreover, Kotahi provides both aggregation *and* coordination of container volumes, and it is these two factors in combination that lead to many of the efficiency benefits. For example, the benefits of increased utilization of domestic transport assets arise not only from increased aggregation, but also from the ability of Kotahi to coordinate offsetting cargo flows and reduce the occurrence of empty transport legs. Likewise Kotahi’s coordination function can facilitate the reduction in shipping costs by combining seasonal transport flows across multiple exporters.

As noted in our 8 September 2011 report (page 9), Kotahi would also result in a more efficient risk allocation (from the supply- to the demand-side), facilitated again by scale and ability to coordinate.

3.3 Larger Ships

The Commission’s draft determination sets out a number of reasons for rejecting the proposition that Kotahi would hasten the arrival of larger ships. In this section we respond to some of the Commission’s specific concerns.

3.3.1 Drivers of Ship Size

The Commission states (at ¶275.1) that total export volumes may be insufficient to justify large ships, referring to advice from the International Container Lines Committee (ICLC) that

⁹ Frans Cruijssen and Marc Salomon (2004), “Empirical study: Order sharing between transportation companies may result in cost reductions between 5 to 15 percent”, CentER Discussion Paper No. 2004-80, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=607062.

¹⁰ Jacques Poulet (2010), “Horizontal Collaboration – The Magic Triangle : 2 Competitors, 1 3PL”, presentation to EyeForTransport conference, 2 June 2010, available at <http://events.eft.com/SCHC/past-presentations-thanks.shtml>.

¹¹ We note also that at ¶264 the Commission notes concerns have been expressed that if Kotahi could increase its own efficiency, this might lower efficiency for the entire market. These concerns seem odd. On the logic of these concerns, freight-forwarders should be banned (or at least not encouraged), as should any sort of arrangements between ICLs.

exports of one million containers per year would be required before larger ships are needed, compared with 800,000 containers by 2015¹² estimated by the New Zealand Shippers Council.¹³ At ¶280.1 the Commission also states that it is total (i.e., New Zealand-wide) freight volumes that “appear to be the greatest driver of ship size”.

There is an issue here regarding the threshold for catalyzing larger ships. We note that the Shippers Council, in its August 2010 “Bigger Ships Report”, states two ways in which New Zealand could support larger ships: (1) combining capacity of existing shipping services; or (2) cargo volume growth over time. By aggregating and coordinating container volumes, Kotahi could speed up the arrival of larger ships through the first of these mechanisms. Moreover, the Shippers Council notes that combining capacity of existing shipping services does not require cargo volume growth and could occur immediately i.e., on 2008 volumes that the Shippers Council estimated to be 508,000 TEU exported and imported on the South East Asia route. The Shippers’ Council’s calculation of 2015 cargo volumes necessary to catalyse larger ships was based on an assumption that capacity aggregation does not occur.

The Commission offers no evidence for its statement that national freight volumes are the greatest driver of ship size. It seems likely that port-specific TEUs would be an equally, if not more, important driver of large ships. Indeed, an important role of Kotahi is to aggregate volumes at only a small number of ports. The Shippers’ Council capacity aggregation scenario appears to be implicitly based on this premise, as it requires cargo aggregation at one North Island and one South Island port. The Shippers’ Council specifically states that “[a] hub-and-spoke model is particularly relevant for a bigger ships future, as bigger ships are likely to call at fewer ports”.¹⁴

The ability for a single port or even a single shipper to catalyse the arrival of larger ships is further suggested by Kotahi’s recently announced strategic relationship with the ocean carrier CMA CGM. CMA CGM noted in its media release announcing this service that it “sincerely appreciates the support and commitment of Kotahi Logistics in enabling this investment”.¹⁵ We understand that, [redacted]. While this particular service would not be considered a “larger ship” in the context of the Shippers’ Council report,¹⁶ it nonetheless demonstrates the ability of a single shipper to attract a given shipping service.

3.3.2 Dispersion and Seasonality of Exports

At ¶275.3 the Commission appears to ignore the coordination role of Kotahi, in noting the wide dispersion and seasonality of New Zealand’s exports as a reason for rejecting the

¹² As an aside, we note that the Commission’s language at ¶275 suggests the Commission is focusing specifically on the year 2015 in relation to the larger ship benefits. However, the year does not matter (other than for time value of money reasons). It is only the delay that matters i.e., the extent to which Kotahi can “bring forward” the arrival of larger ships.

¹³ It is not clear where in the Shippers’ Council report the Commission takes its figure of 800,000 from. We note that in Table 7 of the Shippers’ Council report, a figure of 660,500 TEUs is reported as the volume of exports and imports on the South East Asia route necessary to catalyse large ships.

¹⁴ Shippers’ Council report, p.47.

¹⁵ Available at [http://www.pglnz.com/docs/ANZEX%20Service%20Announcement%201%20Jul%2011\(1\).pdf](http://www.pglnz.com/docs/ANZEX%20Service%20Announcement%201%20Jul%2011(1).pdf)

¹⁶ One media report notes that the service will commence with a 2,200 TEU vessel – see <http://www.shippingonline.cn/news/newsContent.asp?id=20135>

proposition that Kotahi would hasten the arrival of large ships. Kotahi would have a role in coordinating container volumes, and it is precisely because of the wide dispersion and seasonality that Kotahi would result in benefits:¹⁷ Kotahi would both aggregate these volumes and smooth out the seasonality of demand at a small number of ports.

3.3.3 Port Investment

At ¶275.5 the Commission sets out its concerns regarding the absence of any commitment by Kotahi to underwrite port investment. We addressed this concern in our 18 October 2011 report, where we analysed the ability of Kotahi to catalyse the use of 5000 TEU ships without port investment, resulting in benefits of approximately \$100m with a counterfactual of delayed large ship visits, or \$903m with a counterfactual of Australian hubbing.

3.3.4 Land Transport Costs

The Commission appears to consider that the hastening of larger ships to New Zealand is dependent on Kotahi being able to reduce land transport costs (¶278), and that Kotahi is unlikely to be able to do this (¶270). While we maintain that the evidence does indicate land transport costs can be lowered due to increased utilisation (as explained earlier in this report and in our 8 September 2011 report), the ability of Kotahi to hasten the arrival of larger ships is not dependent on changes in land transport costs. Rather, the hastening of larger ships would occur because of redirection, aggregation and smoothing of container flows. In fact land transport costs may rise in aggregate, if increasing costs due to cargo aggregation at a smaller number of big-ship capable ports are less than offset by falling transport costs due to increased utilisation.

3.3.5 Ability to Aggregate at Fewer Ports

At ¶280.2 the Commission states that “Kotahi’s ability to aggregate freight to fewer ports over time is constrained to, at the very most, the amount of cargo its limited partners present currently to ports other than the ports where Kotahi intends to aggregate volumes”. As we understand this argument, it suggests that if, for example, all but one of the limited partners in Kotahi already present export cargo to (say) the Port of Tauranga, then Kotahi’s aggregation of volumes at Port of Tauranga would be limited to the volumes of the remaining partner that currently presents its cargo at some other port.

We make the following responses to this argument:

- The Commission only considers Kotahi partners. Kotahi would also have the ability to aggregate volumes from its customers;
- The Commission does not take into account the coordination/smoothing role of Kotahi. Even if Kotahi’s partners do all currently present their export cargo to the same port, we understand that Kotahi would smooth out the arrival of these exports to the port so that they could potentially all be loaded on a single vessel, thereby increasing vessel utilization; and

¹⁷ It is also the case that some products will be more time critical than others (e.g., perishable goods), and coordination of container flows for these products might also result in benefits.

- The Commission does not take into account the risk management/reallocation role of Kotahi – as demonstrated by the CMA CGM example above, [1](#).

NERA

ECONOMIC CONSULTING

NERA Economic Consulting
Level 8, PWC Tower
113-119 The Terrace
PO Box 699
Wellington 6140
Tel: +64 4 819 2550
Fax: +64 4 819 2552
www.nera.com