

Transport Infrastructure & Economic Development New Zealand Summit  
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**Driving Greater Economic Productivity with Targeted  
Infrastructure Investments**

**The role of ports and shipping in stimulating economic prosperity.**  
**Jens Madsen**

**Introduction**

Good morning, ladies and gentlemen. Thank you for the opportunity to speak to you today.

It is my privilege to present to you a New Zealand port's perspective on the role of ports and shipping in stimulating economic prosperity.

If you were to ask me: what keeps me awake at night in relation to Ports of Auckland – and its particular place in contributing to economic prosperity – it would be these three things:

1. Productivity – and at the port that can be expressed in terms of our ability to turn ships around faster,
2. Unit cost – ensuring, in current terminology, a lean operation, and
3. Return on capital investment – and therefore the dividend that can be generated for our shareholder.

That is where our focus is, and where the opportunity lies for us in particular, but also for the port sector in general.

Today, I'll address the challenges faced by NZ ports – given current industry trends – what this means for infrastructure investment, both on- and off-port, now and into the future; and how we can mitigate the very real risks for exporters and importers if New Zealand was to end up as a transport spoke to Australia, rather than a hub of its own.

Meeting these challenges will determine how we improve against the measures of productivity, unit cost and return on capital; and therefore how we contribute to economic prosperity.

In their presentations, Tony Friedlander and Nigel Jones have provided a valuable context on rising freight demand; the importance of improving the country's supply chain productivity; and the need for a well co-ordinated, national approach to maintaining New Zealand's international competitiveness.

I think we all agree on the critical need for a long-term view of infrastructure investment (both on- and off-port), and to work co-operatively and collectively to deliver an efficient and productive supply chain to stimulate economic prosperity in the best interests of kiwi exporters and importers, and ultimately, the consumers.

Supply chain management has been defined as "an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive and high-performing business model".

None of us in this room will be surprised about that! Our challenge is how to develop a model that serves not just individual interests, but the best interests of our respective shareholders, other stakeholders and NZ Inc.

The consequences if this is not achieved will be considerable for a trading nation such as New Zealand.

Each operator in the chain has been through some very challenging economic conditions over the past two years, and we the New Zealand port sector have adapted to meet these in our own ways.

Container cargo volumes for Ports of Auckland held up fairly well in 08/09 – up 0.3%, and we saw encouraging signs of a further recovery in the last quarter

of the 2009 calendar year. But obviously even a 0.3% increase was well behind our historical annual growth rates of 6-7% - vehicle imports took a big hit, too.

We responded quickly with a major cost reduction exercise and a project to consolidate our two separate container terminals into one.

With conditions improving now, to my mind, our focus needs to shift back towards a NZ Inc. perspective. We need to be less inwardly focussed, continue to drive the efficiency gains we've achieved in our respective businesses, but adopt a smart, long-term, and co-ordinated national approach towards a more productive and efficient national supply chain, and to prioritise the infrastructure investment needed for that.

New Zealand is at an important "crossroads" right now.

From a port's perspective we're facing many challenges – with a significant rationalisation in the global shipping sector, and particularly with the massive investment Australia is making in its ports, off-port infrastructure, and approach to supply chain management.

To enhance New Zealand's economic prosperity, and ensure we maintain a competitive international position for New Zealand business trading internationally, a new level of alignment and co-operation is required across the entire supply chain.

### **Ports of Auckland**

First of all, I want to briefly recap on Ports of Auckland, and our role.

Our location in the heart of New Zealand's largest and fastest growing city, gives us an important strategic advantage. We are New Zealand's leading import port, by far the largest container and cruise ship port, and vehicle import hub.

We operate from three sites: the Port of Auckland on the east coast, the Port of Onehunga on the west; and the Wiri freight hub in South Auckland.

Ports of Auckland is currently 100% owned by Auckland Regional Holdings, the investment arm of the Auckland Regional Council – a shareholder with a mandate to act in the best, long-term interests of the Auckland region. While the current ownership structure will change in November this year, with the transition to a new Auckland Council, our importance to national and regional economic development is well recognised.

Each year, we service more than 1,600 ship calls, and handle 2.7 million tonnes of “break bulk” or non-containerised cargo.

Perhaps most importantly in terms of our role in the supply chain, we handle around 850,000 TEU (or 20 foot-equivalent units) of containerised cargo.

Overall cargo handled by Ports of Auckland is worth \$27B annually – that’s 15% of the country’s GDP – an amount equivalent to the ports of Whangarei, Tauranga and Lyttelton combined.

In FY2009, we held 35.7% of the overall New Zealand container market; 49% of the North Island container market, and 61% of the upper North Island container market (up from 59% in the preceding year).

It is worth noting that growth from 1990 to 2010 averaged around 6-7% p.a. - indicating a doubling in volume every 10 years.

Because of the growing dominance of containerised shipping, and its importance to economic growth and prosperity in New Zealand, it will be largely from this perspective that I will be talking today.

### **North Island Capacity Constraints**

Population growth projections in Auckland will result in significant growth in North Island freight demand over the next twenty years.

The National Freight Demand Study of 2008, for example, noted that volumes of freight are expected to rise by 70-75% in that time. The bulk of that growth is expected to occur in the upper North Island.

Increased trans-shipment of South Island cargoes north is already occurring, which will further challenge the upper North Island ports' capacity requirements over the medium to long term. To put it in perspective, currently around 60% of volume goes through the two major ports and that is expected to rise to 70% through trans-shipment.

To avoid any systemic infrastructure failure – such as we've experienced in the electricity sector and to a degree in roading – upper North Island ports will be collectively required to provide sufficient container port capacity to support the supply chain over the longer-term.

Investment in expansion and improved productivity at each main port is needed to meet this demand, and some sort of future strategic arrangement between ports is likely to be required in the interests of NZ Inc.

Lyttelton and Dunedin ports are currently down the track in terms of merger discussions. Once the major Auckland re-organisational changes have been bedded in, similar discussions could, and perhaps should, as suggested by various parties come back on the agenda.

### **Global Shipping trends and their impacts for NZ ports**

Intense competition in recent years has led to a major global rationalisation in the shipping industry. Now, a very small number of players hold a dominant position internationally. Here in New Zealand the top five container shipping lines account for almost 80 percent of the New Zealand market.

From having 20 major shipping lines visiting New Zealand in the early 1990s, there are now just eight mega shipping conglomerates left.

For them, global contraction in trade has resulted in declining profitability, weak freight rates and over-capacity.

With most of the large international shipping lines either barely profitable or not profitable at all, they're actively stripping costs from their operations though an intensive drive towards further industry rationalisation and efficiency improvements.

New Zealand ports are feeling the effects of this in a number of ways:

Bigger Ships: The average size of container vessels calling into New Zealand has quadrupled from 800 TEU capacity in the 1980's, to around 3,000 TEU on average today. And, this trend is continuing with the average "global" ship on order exceeding 6,000 TEU. The latest ships to be built are topping the scales at 14,000 TEU.

Larger Australasian ports, are equipped to currently handle ships ranging up to 5-6,000 TEU, with the largest current regular visitor to New Zealand ports being a 4,500 TEU vessel. Accommodating vessels larger than this will for a number of ports in New Zealand require investment of significant extra capital in further dredging and increased berthage capacity.

Fewer Port Visits/Peaking Issues : These larger ships are visiting New Zealand ports less frequently, which places much greater peak demands not only within the port gates, but on supporting transport infrastructure.

New Zealand ports are working hard to address these challenges by increasing operating efficiencies within the port gates. We're working smarter and faster, exercising a tight control on costs, and getting more done with less.

Still we are challenged to achieve appropriate service levels and return on capital for shareholders. We are therefore looking at step changes that need

to be achieved. This involves tough decisions that need to be made such as reviewing the current labour model to support future prosperity.

Working together with our key customers, suppliers, shareholders, employees and the government is vital to protecting the interests of New Zealand importers and exporters in the global supply chain, and to mitigating the effects of the massive investment in Australian ports.

Efficiency Improvements: Shipping lines are working smarter with Vessel Sharing Arrangements (or VSA's) – similar to airline code-sharing arrangements - that ensure ships visiting this part of the world are as close to capacity as possible when arriving and departing.

Shipping lines are working hard to improve overall efficiency, but these initiatives are already creating new issues for New Zealand exporters. You may have read recently about the “slow steaming” phenomenon, where shipping lines are cutting fuel costs by operating at slower speeds. This is extending time to market for New Zealand exporters, and shaving time off the shelf-life for perishable products.

Price Competition: Increased shipping capacity is driving costs down from the shipping companies' perspective, but further increasing price competition between New Zealand ports, and others in the supply chain as it currently operates.

This puts further pressure on ports' return on capital, and will increasingly influence decisions on capital expenditure.

If we are to protect New Zealand's position against Australia, for example, we need to work even closer together to address the challenges that this issue presents.

## **Australian Investment in Ports and Infrastructure**

Without a concerted and well-co-ordinated, whole of supply chain approach, we run a major risk of ending up as a feeder to an Australian hub in the global trade network.

In its October 2009 report, "Long Term Optimisation of the New Zealand Port Sector", our shareholder, Auckland Regional Holdings benchmarked the New Zealand Port sector against Australian Container ports.

What is most worrying about this data is that with the global trend to hubbing, and the Australian government's massive investment in ports and supporting infrastructure, New Zealand is lagging way behind.

New Zealand has 11 operating ports to Australia's six, with significantly lower throughput and profitability by comparison.

The east coast Australian ports of Melbourne, Sydney and Brisbane are Australia's largest ports by container volume, with a combined total of 80% of container trade, and over the past five years, combined volume through these three ports has grown at 300,000 TEU per year.

In 2008, the Australian Federal Government announced an infrastructure package of AUD \$20B to boost road, rail and ports infrastructure in Australia, and since then, all three state governments have committed additional investment to extend their respective port's capacity over the longer term.

And, by the end of this year, the Australian Federal Government will have concluded a multi-faceted response on key issues affecting coastal shipping and both landside and portside infrastructure with the delivery of Infrastructure Australia's National Ports Strategy and National Freight Network Plan.

## **On-port issues**

New Zealand ports, by comparison, are contending with several major issues, including:

Investment constraints: Ports are by nature highly-capital intensive, and current returns are insufficient to justify future investment. Real unit revenues and EBITDA at all New Zealand ports have materially declined over the past decade.

At our own Port, focus has shifted to achieving maximum efficiency and productivity over the longer term. We're working to optimise the use of existing assets, and explore ways to tightly control capex in the short term.

The longer investments can be deferred, and high-fixed costs delayed, the better. In the future, we will only be prepared to make major investments on the back of very firm, long term customer commitments and contracts.

Trade Imbalances: The current imbalance between exports and imports at New Zealand's ports creates inefficiencies which costs New Zealand's supply chain dearly.

Currently we have a disproportionately large number of empty containers needing to be re-distributed around the country. For example, some 30% of all containers leaving or coming into Ports of Auckland are empty. Other ports face their own issues with imbalance.

Improvements in logistics and investments in inland ports like our Wiri facility, are going some way to addressing this issue, but ultimately shipping lines and port companies will need to work hand in hand to deal with this phenomenon in the best possible way.

Reducing unit costs: The recessionary environment has forced New Zealand ports to effect a step-change in the way we operate, just as it has for the global shipping companies, and everyone in the domestic supply chain.

Ports of Auckland has made encouraging progress at reducing costs, and we are a significantly leaner and more efficient port than we were 18 months ago. Variable costs, including labour, are coming under increased scrutiny.

As we move to manage peak handling requirements, introducing more flexible labour models will be imperative for New Zealand ports to become more flexible, more productive and more competitive.

Integrating with Transport Modes: While all ports face challenges in linking with different transport modes, this offers particular challenges for a city port like Auckland.

Interestingly, a Beca Report commissioned by Ports of Auckland last year into Auckland's strategic roading improvement projects, noted that if all planned projects were progressed, the substantial growth forecasts for the Auckland Region could be accommodated with only a minor reduction in accessibility to and from the Port compared to today's levels.

That is good news.

You will see from this aerial view of the port how crucial road and rail are to our operations. For us to play our part we need to work with these modes more closely, as well as with coastal shipping, depending on what is most appropriate.

Port Rationalisation: With eleven New Zealand ports to Australia's six, the benefits of port sector optimisation are widely recognised.

We expect this will be driven and perhaps accelerated by market developments over the next few years, provided that governance and structural arrangements allow this to happen.

Optimisation will not necessarily involve a reduction in the number of ports, but a clearer and more strategic view of how each individual port, or

combination of ports, works within an efficient supply chain to create improved value for New Zealand exporters and importers.

New Zealand is a small country with scarce capital. Until optimisation is realised, there is a significant and ongoing risk of unnecessary duplication of investment (for example in dredging, road and rail infrastructure). Over-investment, or duplication of investment in the port sector would be highly damaging to the New Zealand economy.

### **Off-port issues**

To retain our current position against Australia – and to ensure local exporters and importers remain globally competitive - New Zealand port and transport infrastructure planning and investment needs to be highly interdependent and well-integrated.

Future infrastructure investment decisions need to be carefully made within the context of a longer-term, strategic approach in the best interests of the country.

Presently, freight is too reliant on our roading networks – accounting for 92% by weight according to the National Freight Demand Study.

Our rail and coastal sea freight modes are significantly under-utilised. Rail accounts for only 6% of transport volume, while coastal shipping is just 2%, and the connections between the various modes of transport are inadequate.

Throughout the sector we acknowledge that a modal shift to rail is needed, however, trucks will always remain important for transport flexibility and supply chain resilience.

As Steven Joyce noted last week, “the reality is we need to have all three transport modes working to complement each other, and have their level of usage determined by their relative costs and convenience, and therefore suitability for the myriad of different types of freight carried on them.”

“The best way to achieve this and ensure all three modes are used appropriately is to ensure that each is priced at a level that reflects their costs so that freight-forwarders, exporters and importers all have clear choices.”

The New Zealand government faces some extremely difficult policy decisions about future investment in road and rail, and the extent to which this investment is supported by the taxpayer.

For its part, the port sector has moved to improve supply chain efficiencies off-port by building an infrastructure of inland ports, like we've done at Wiri.

This not only increases our capacity, but moves cargo handling closer to our key markets while also removing costs from the supply chain.

For Ports of Auckland, Wiri has given us the opportunity to establish closer and more direct relationships with import and export customers, and to work closely with them to get their products to their customers in the leanest possible manner.

It has also given us the opportunity to establish an improved dialogue and stronger relationships with partners like KiwiRail.

A great deal of work is being done to achieve improved utilisation and efficiencies outside of the port gate. However, there is still a long way to go.

### **Suggestions for a longer term co-ordinated solution**

New Zealand is a unique economy. Our primary production sector is highly reliant on an efficient, cost effective and reliable supply chain which allows producers to connect directly with their export markets.

The New Zealand Government has indicated that it sees infrastructure development as vital to New Zealand's future economic growth and

productivity, and the National Infrastructure Plan released in March, provides a positive step forward.

To establish a framework and certainty for future public and private investment, and a more co-ordinated approach across the supply chain, we will need to develop a coherent strategy, similar to that which is underway in Australia right now.

New Zealand has an 'information deficit' about our supply chain operations as a whole. Working more closely together, and sharing the information needed to understand the dynamics of our trade flows, will be essential to achieving a coherent and strategic approach over the long-term.

As Auckland Regional Holdings noted in its "Long Term Optimisation of the New Zealand Port Sector" report, optimal configuration of the New Zealand port sector and national supply chain will require:

- Identification of future New Zealand hub ports in the context of the overall supply chain
- Input and information sharing from all industry stakeholders
- Government support for industry led initiatives, as well as,
- Government coordination of recommendations from all industry stakeholders to develop a National Ports and Freight Strategy – like Australia is doing.

From a ports perspective, a thorough review of the current structure of the New Zealand port sector and regulatory and policy environment will be an important first step.

The next step will be improved coordination within the sector to address any bottlenecks and minimise duplication of investment, as well as rationalising the sector to gain increased bargaining power with international shipping lines.

## Summary

In conclusion, the lack of a well-planned and co-ordinated approach to the New Zealand supply chain is neither efficient nor sustainable, and poses a threat to New Zealand's future economic prosperity.

A longer-term view of investment in ports and transport infrastructure is essential to delivering a well-integrated, efficient and productive supply chain which will sustain New Zealand's competitiveness in global markets.

As a recent New Zealand Herald article on the ports sector noted, the fate of New Zealand exporters, and the national economy is closely tied to the international shipping trade.

Hubbing out of Australia could add an extra four days to the supply chain with catastrophic impacts for New Zealand exporters.

New Zealand cannot match the level of investment Australia is committing to its ports and transport sector over the medium term.

To compete successfully, and retain our hub position, a partnership and whole of supply chain approach is needed at both a regional and national level.

Individually we need to address productivity. We need to address unit cost. We need to address return on capital.

When all that happens – and it needs to – we will be contributing to economic prosperity.

And at the same time I will probably be sleeping better.

Thank you, and I look forward to answer any questions.