

Developing sustainable and efficient ports at the doorstep of business and industry

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Speech to Transport New Zealand Summit

Rendezvous Hotel, Auckland

2 June 2010

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

It is my privilege to present to you a perspective on developing sustainable and efficient ports at the doorstep of businesses and industry.

To some extent, history reinforces what can be achieved through such an approach, as the Port of Auckland in Waitemata Harbour was very much founded on this same principle.

It is quite clear that accessibility and natural advantages of the harbour here provided the platform for Auckland to develop into the city as it is today.

In 1840, Captain William Hobson in fact gave his reasons for his choice of Auckland as the then capital as being: “First, by its central position; secondly by the great facility of internal communication by the Kaipara and its branches to the Northward and the Manukau and the Waikato to the Southward; thirdly from the facility and safety of its ports, and the proximity of several smaller ports abounding with the most valuable time; and finally by the fertility of the soil...”

Perhaps the only thing to have really changed with that assessment is the massive growth of population in the Auckland region since that time which of course is closely related to these features that we all know and love.

The Port’s own development has been inextricably linked to that of the region.

As business and industry has grown, so has the port.

This diagram of reclamations between 1859 and 1926 shows, just how much downtown Auckland physically owes to the port.

Including subsequent reclamations such as the development of Fergusson Wharf, over 150 hectares of land has been reclaimed over time for port operations.

Of course recognising the value of this land now, as the city has developed, is why an efficient and sustainable operation is imperative. It is not land to waste.

Another point to make, and one that no audience would be more fully aware of, is our position as an island nation – a trading nation – highly dependent on our links to the rest of the world.

Because of our distance from our major trading partners, shipping - and therefore the ports through which imports and exports are channelled – are a fundamental component of the supply chain.

What Ports can do to enhance efficiencies is therefore critical to all New Zealanders.

This is a Ports of Auckland challenge – but also a Port Sector challenge, and while I will mention some specific examples of strategic initiatives undertaken by Ports of Auckland, my conclusions will be very much focused on the high level, and particularly on the need for a rational, non-paraocial, multi-modal view of transport sector efficiencies.

In another recent presentation that I gave, at which some of you are very likely to have been present, I talked about the things keeping me awake at night:

- Productivity – in terms of our ability to turn ships around faster,
- Unit cost – ensuring a lean operation, and
- Return on capital investment – and therefore the dividend that can be generated for our shareholder.

No doubt I share these areas of focus with everyone here who operates in a commercial and competitive environment.

Unspoken, but fundamental to long term commercial success is ensuring that any achievements in relation to these three categories are sustainable.

Today I will talk about the challenges the Port Sector faces, particularly in relation to contributing to sustainable solutions.

I will offer some examples of the strategies Ports of Auckland is implementing to meet current and future demand.

Firstly, however, it is reasonable to ask why we need efficient ports on the doorstep of business and industry...

It is because inefficient ports, just like inefficient road or rail links can clog the supply chain – like cholesterol clogs an artery - and that results in costs for those relying on the goods being imported or exported.

Ultimately, the economy suffers.

The World Bank has done considerable work on transport costs, particularly on the cost of delays and how that impacts on some landlocked countries which tend to be among the poorer countries of the world.

While we don't face anywhere near the problems of many such countries, the message is that we must be the best we can be, in order to support the country being the best it can be.

Looking at the World Bank's cost framework, it divides total transit costs into three main components:

1. Transport costs *per se* – being fees paid by the shippers for actual transportation services.
2. Other logistics costs – being fees and charges for transit procedures, freight forwarder costs and other facilitation payments.
3. The costs of time and delay – being the cost of inventory in transit and the cost of unreliability.

In relation to the cost of time and delay, the World Bank calculated that financing charges, damage and loss, container rental, demurrage charges, etc, equated to about 0.1% of the value of shipment per day.

The cost of disruption in the production chain, loss of contract, loss of produce etc, equated to about 0.8% of the value of shipment per day.

Combined, you could say any delay could cost close to 1% of the value of shipment per day.

With the total value of trade through Ports of Auckland at around \$25b per annum... a cost of \$250m would be incurred for any extra day that was taken in facilitating those goods getting through to the end user. That cost has to be borne somewhere, and represents inefficiency that any economy, landlocked or not, needs to avoid.

That, on its own, is a very good reason why it is very important to have an efficiently operating port on the doorsteps of business and industry like the Ports of Auckland.

This leads me to reflect on some of the challenges that we face, however.

In my view, the New Zealand Port Sector is at an important “crossroads”.

We’re facing many challenges – including the significant rationalisation of the global shipping industry, as well as 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 our own supply chain.

In terms of global shipping trends and their impacts for NZ ports it is a fact that a very small number of shipping companies now 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 individual lines and alliances left.

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

New Zealand ports are feeling the effects of this in a number of ways – and, unfortunately some of the pressure of these trends do flow through to other parts of the supply chain.

We are seeing bigger ships coming to our ports.

The average size of container vessels calling into New Zealand has quadrupled from 800 Twenty-foot Equivalent Units (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.

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-type 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.

Ports of Auckland is well placed to meet customer trends in this area through a development programme I will note later. The challenge from a New Zealand Inc perspective is managing double ups in capital expenditure.

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.

Peak demands challenge our gate planning and intermodal integration particularly with the trucking industry.

Ports of Auckland is working hard to address this issue through a significant investment into a single-platform terminal management system.

New Zealand ports are also working hard increasing operating efficiencies within the port gates. We're working smarter and faster, exercising a tighter 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.

Efficiency Improvements: Shipping lines themselves 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.

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.

There is less tolerance in the system now, for on-port delays.

Another challenge is one of capacity.

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

While currently 33% of the New Zealand population resides in the Auckland region, that is projected to rise to 38% by 2020 – and reach an overall population of 2-million by 2030.

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

As a report from Auckland Regional Holdings on the subject states, when it comes to the two main North Island ports: “it’s not a matter of one or other, it’s a matter of both operating efficiently and effectively.”

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

Our ports do contend with other on-port issues.

These include:

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 exploring ways to tightly control capex in the short term.

In the future, Ports will only be able 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 Freight Hub 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.

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

Planning and investment are paying dividends, however.

A Beca Report commissioned by Ports of Auckland into Auckland's traffic growth through to 2021, and the city's strategic roading improvement projects, summarised 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.

So is the important strategic development we have made in re-integrating our Port more efficiently with rail via our Wiri Freight Hub which literally does take our Port, to the doorstep of businesses and industry in the fast growing area of South Auckland.

This brings me nicely to some specific initiatives, noted as examples of what Ports are doing.

With 15ha available, our Wiri Freight Hub not only increases Ports of Auckland's over all capacity, but moves cargo handling closer to our key markets while also removing costs from the supply chain.

Our Wiri site 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.

The development includes three rail sidings, 2,000m of rail track and a hardstand about the size of the Britomart station.

What does this mean? It means flexibility and efficiencies.

A lot of the Wiri Freight Hub's current customers are based within ten kilometres of the Freight Hub. By using the rail link to the seaport, this group will be able to reduce the carbon emissions of transporting their containers by up to 40%, with an average of 25% reduction overall.

There are also big potential benefits for the community through reduced road congestion.

When functioning to full capacity, Wiri will eventually save around 100,000 inner city truck trips - or 2.5 million kilometres - per annum.

The intermodal connections that Wiri offers will also help Ports of Auckland – in conjunction with exporters, importers and shipping lines – work smarter;

- taking cost out of the supply chain
- increasing productivity, and
- offering customers and other users more flexible options for moving their goods.

Importantly it helps to free up capacity at the Waitemata seaport enabling us at Ports of Auckland to prepare for further growth.

Operating sustainably means preparing for such growth so I would like to briefly outline some of our other plans.

You can see from these images here how Ports of Auckland plans to intensify to the East

The top plan is similar to today's layout except we have not fully developed the northern end of Fergusson Terminal.

Completion of stage 2 reclamation and the building of a northern berth could take between 5 and 10 years – but could be sped up and be finished in 3-5 years – all depending on customer requirements.

The reclamation process uses maintenance dredging from the harbour - which is mixed with concrete to form a solid base that we refer to as mudcrete.

In our planning we ultimately intend to expand our operation between Bledisloe and Fergusson to accommodate the new generation of container vessels.

The lower panel indicates what the Port 'could' look like in 20 – 30+ years. We would envisage that the Terminal activities are marshalled on the northern end and from the centre to the East whilst General Wharf and Breakbulk cargoes are handled on the western side.

Of course it's not just about expanding our capacity on the waterfront.

It's also about working smarter with new technology.

In terms of blue-sky thinking, we are considering the phased Introduction of an Automated Stacking Crane Operating System, once business volumes hit the roof.

- This would involve a phased transition of the Fergusson Terminal operating system from Straddle Carriers to Automated Stacking Cranes.
- It would take place in stages, timed to meet demand, and would more than double existing terminal capacity.
- Full transition is expected to take 15 years or more.

In summary, I hope you are reassured that much is being done by Ports in general to bring innovation and efficiencies to the supply chain.

For a port such as ours, operating in such a way is part of our history. Our responsibility to continue sustainably is very much part of our DNA.

There is, however, much more to do.

As New Zealand's largest container port and a critical link in the chain, we are committed to driving efficiencies and productivity on port, and to taking a leadership position in the supply chain.

But we cannot do it alone. For the port sector, this means overcoming parochialism to look at ways each port can work more closely together to achieve mutual gains.

New Zealand's ongoing international competitiveness is dependent on the country's ability to connect directly with the major east-west trade flows to the larger markets of Europe, US and Asia.

We as a country cannot afford to find ourselves in a position where we don't have a sustainable, cost effective sea freight network supported by highly efficient domestic transport infrastructure, integrating with ports like Auckland at the doorstep of business, ready to support economic growth.

Thank you for your attention today and in any time left, I am certainly happy to take any questions.