



**PORTS OF
AUCKLAND**
TĀMAKI HERENGA WAKA

Interconnect

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In this Issue

- Port Automation
- POAL's Very Independent Point of Difference
- Our Great New Tools

CONTENTS

- 2 POAL Focus**
- 4 Operations Review**
 - Heart Transplant
 - Automation
 - New Berth Built for Three
- 6 Supply Chain**
 - Spreading the Net
- 8 Nexus**
 - POAL's Point of Difference
- 10 Port Development**
 - Port Connect
 - Great New Tools
- 12 Market RoundUp**

Editorial: Anne Hunter
Front cover photo: Looking back at Auckland city from the heights of a ZPMC crane on Fergusson container terminal

Back cover photo: Ports of Auckland's new landscape featuring the recently constructed Holcim white dome shaped cement silo



Tony Gibson
CEO Ports of Auckland

POAL Focus



The 2014/15 financial year was a good one for Ports of Auckland despite a number of challenges. Our performance continued to improve and, as the official statistics show, our container terminal is now the most efficient in Australasia with record productivity this year. That is a major achievement and one that we hope makes our customers happy and Aucklanders proud. We also delivered a good financial performance and another strong dividend for Auckland.

Container volumes hit another record – after having been expected to fall – and multi-cargo volumes boomed, especially cars. None of this would

be possible without our customers and supply-chain partners, so I'd like to thank you for your continued support. Recognition of our performance came in September with POAL's selection as a finalist for the Terminal Operator of the Year in the 2015 Lloyd's List Asia Awards – the only port in the Southern Hemisphere to be shortlisted. Whether we win or not, the fact that we are up among some of the world's biggest and best port operators is a real win for our team.

Things look tougher for the next financial year with a slower economy a lower dollar and lower commodity prices. Growth is unlikely to be as

vigorous. However looking further ahead, Auckland's story is all about growth and to accommodate that we are making significant investments in rail, on-port and the off port supply chain. We have greatly increased our use of rail with a quadrupling in rail connections between the port and our Inland Port at Wiri. That has resulted in 3,000 less truck movements a month to and from the terminal. Our goal is to move 35% of our total throughput on rail.

We have developed a network of intermodal freight hubs – so far at Wiri, at Longburn in the Manawatu and most recently at Mt Maunganui in the Bay of Plenty. Watch this

space to hear about more links in our supply chain. It's an exciting development that enables us, in conjunction with our hub operators and our 4PL logistics provider Nexus, to improve options for NZ cargo owners, to reduce their costs and facilitate the most efficient flow of their cargo across NZ. We have successfully implemented our new port operating system (Navis N4) in July as part of our plan to use technology better and become a smarter port. N4 will support other smart initiatives such as using Optical Character Recognition (OCR) to speed up handling at the terminal.

We are also consulting staff and carrying out a scoping study on a proposal to partially-automate the container terminal. Automation has the potential to deliver capacity and performance benefits and ensure we continue to perform at world class levels.

Finally, thanks again for your continued support. May you enjoy a busy and productive peak season and a happy and relaxing festive season to follow!

State of the Art in Cement

Ports of Auckland is now host to a state of the art, huge white, 30,000 tonne capacity cement storage dome owned and operated by Holcim, a major supplier of cement, aggregates and ready-mix concrete to the NZ market. The inflated dome is part of Holcim New Zealand's NZ\$100M restructuring which includes the dome in Auckland and a similar new facility at PrimePort Timaru.

Holcim says the Auckland terminal will provide effective access to the major market of the greater Auckland and the upper North Island. The dome is in the process of being strengthened and fitted out and is expected to be fully operational within the third quarter of 2016.

Heart Transplant and Expansion



It was a heart and lungs transplant – a job rarely undertaken without a shutdown period or a serious amount of customer pain. So it was that in July 2015, without any noticeable shutdown, POAL introduced its new operating system, Navis N4. In the switch over from the old SPARCS system to going live with N4, the implementation process was recognised ‘the best in Australasia’ by Navis, by other ports who had suffered through glitches in their own system implementations and, most importantly, by POAL customers.

General Manager Operations, Raoul Borley, confirms that POAL put enormous effort into reducing the risk of system outages

Automation



Automation is among the advances enabled by the new system including such tools as OCR – Optical Character Recognition Cameras and PDS – Position Detection Systems – both designed to reduce damage, speedup and streamline container stacking and retrieval in the yard and at the gates.

Raoul Borley explains that the port is half way through a consultation process with staff about a proposal to partially automate the container terminal. A decision will be reached early in 2016. He explains that the proposal would involve the use of 15.5m high automated straddle carriers that can stack containers up to four high (3m higher than existing machines in the fleet that stack three high) to carry out the less complex tasks in the yard. “Returning a 30% increase in terminal capacity, this automation would also make the job easier for staff while reducing the complexity of some of the more mundane tasks like punching numbers into the

computer – the type of task that the system takes over automatically. So, we take out the boring tasks that people don’t function well at but retain a significant element of engaged labour while increasing their engagement with tasks people are inherently good at and enjoy doing. Automation is all about how well you handle exceptions; people are good at exceptions, machines are not.”

If automation proceeds then **POAL would be the first automated container port in NZ**. “We have some unique ideas and innovative approaches that we believe would make **our version of automation, a global game-changer**. We would like to lead the world – not just NZ – in a version of automation that we believe we can install at a fraction of the cost currently being spent by others to achieve the benefits of automation” said Raoul Borley.



New Berth Built for Three

A contract was signed for the construction of a new northern berth at POAL’s Fergusson Container Terminal and wharf in September. Due for completion at the end of 2017, it will make Fergusson a three berth capacity container terminal. POAL GM Operations, Raoul Borley, confirms that three new cranes will be ordered to arrive to coincide with

the completion of the new berth. “We are currently evaluating what cranes we will buy but I can say we will be looking closely at semi-automatic, remote-control models. Certainly with multi-lift capacity for up to 4 X 20ft or 2 X 40ft containers, they will have greater capacity and be more productive than our current cranes.”

Spreading the Net

A year ago Ports of Auckland unveiled a dynamic new supply chain strategy based on the development of a network of intermodal freight hubs and the provision of independent container logistics and distribution services across NZ.

Since then POAL has continued to develop the network. Recently its new intermodal freight hub at Mt Maunganui in Tauranga, Bay of Plenty, became the third link in a network that includes Longburn in the Manawatu and Wiri in South Auckland. And the network will continue to expand with more links and hubs expected before the year end.

On announcing the Mt Maunganui hub in August, POAL Chief Executive, Tony Gibson, said the network of freight hubs (sometimes called Inland Ports/IPs) "is part of a concerted strategy to invest in a network of freight hubs across the North Island, to both improve options to NZ exporters, reduce their costs, and maintain Ports of Auckland's position as NZ's leading container port by volume and productivity".



Aerial view of Ports of Auckland Wiri Intermodal Freight Hub

The state of the network is such that Longburn, run for POAL and Joint Venture partner Port of Napier, by Icemark which has its coolstore there, is up and running full steam. WIRI in South Auckland, POAL's original IP, has been operating for years. The major new development there, the Scales Group's coldstore, is almost finished and additional infrastructure including hardstands

has been completed. The construction of a cross-dock facility will begin soon.

The new star in the POAL supply chain galaxy, the Bay of Plenty site at Mt Maunganui, is adjacent to a rail siding. Container handling and other value-added logistics facilities and services are being installed and the rail infrastructure and

development is due for completion early 2016. This site will be run by Australasian transport and logistics specialist Toll Group.

All these links in POAL's developing supply chain network, mean shipping lines calling Auckland with cargo for other NZ regions e.g. Bay of Plenty or Manawatu can have cargo transferred directly to the POAL IPs for onward distribution. The process is repeated in reverse for export cargo emanating from the regions.

POAL's General Manager Business Development and Chief Financial Officer, Wayne Thompson, confirmed that POAL will continue to take a landlord role in the development of its supply chain network, to provide the infrastructure. It will work with third parties who operate the freight hubs. "The other important part of our strategy is our investment in Nexus Logistics Ltd, a high level 4PL provider. The Nexus role is to provide national container and intermodal logistics solutions to cargo owners. Nexus is the exciting part of our supply chain offering and our real point of difference".



POAL's Very Independent Point of Difference



"Nexus is about taking the cost out of the supply chain, providing choice and options" – Stephen Owles, CEO Nexus

A 50/50 Joint Venture between POAL and established 4PL provider Netlogix, Nexus is the core link in POAL's Supply Chain strategy. An independent operator founded on collaborative principles of maximum customer choice, Nexus provides national container and intermodal logistics solutions to the cargo owners to facilitate the efficient flow of cargo across New Zealand via the smart use of technology and the utilisation of an 'optimised multi-carrier mix of sub-contracted road, rail and coastal capacities and services'.

In his profile of Nexus, CEO Stephen Owles says the Nexus focus is on reducing NZ's inherent and excessive amount of empty container movements, by tapping into that wasted capacity to achieve a much more cost effective balance in the volume of export and import containers. "And of course Auckland has more empty containers than anyone else as the major NZ import port" he explains.

He highlights the independence of the Nexus national service: "This is an open platform; it is available

to all stakeholders in the supply chain – and so, not influenced by a dominant major shipper or indeed by any one port. That port neutrality really is our point of difference. By that I mean, Nexus is not there to drive cargo solely through Ports of Auckland – yes, it will if POAL is the best option for the customer but if the best solution lies at another port, then that will be the Nexus recommendation. Nexus is about taking cost out of the supply chain, providing choice and options".

He also points to the big advantage and one appreciated by all customers whose logistics and distribution needs are processed by Nexus – a single point of contact for anything and everything to do with the service. "Despite being a multi-carrier environment in which several carriers may be contracted to provide a customer's solution, all aspects of the service are processed by Nexus – accounts, service, safety, everything; this is a single desk environment".

The Nexus customer list continues to grow. It already includes major national and international names, exporters and importers. Two companies who have used Nexus from the beginning are the major NZ importer, retail chain The Warehouse and the international FMCG manufacturer Nestlé which is both an importer and exporter in the New Zealand market.



Port Connect



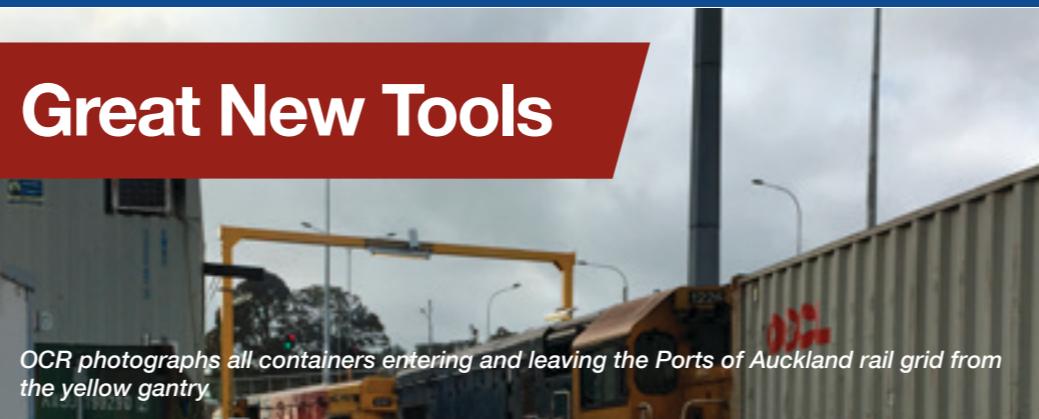
Two years ago in a ground breaking move, New Zealand's two largest ports, Ports of Auckland and Port of Tauranga, joined forces to launch PortConnect, the first NZ shipping portal.

Since then the single window, electronic cargo information and management system, has progressed from infancy to replace both ports' original systems – Interact (POAL) and CargoConnect (POT).

In this unique NZ port collaboration, the development focus has been on functionality according to Dan Cowie and Graeme Petch, General Manager and Operations Manager for the 50/50 POAL/POT-owned Joint Venture company, PortConnect. They report that with container clearance and export pre-advice up and running, customers are benefiting from the obvious advantage of standardisation by

the removal of duplication of the multiple processes required for doing business with both ports. "At PortConnect they have a single point of contact for NZ's two largest ports and we are hoping other NZ ports will join in due course" says Graeme Petch. Dan Cowie promises there is a lot more to come. He says the continuing evolution of PortConnect includes more electronic interfaces with customers and a trial programme of a new system called Container Triangulation that is designed to reduce the multiple legs in the import/export movement of the container. Watch this space.

Great New Tools



OCR photographs all containers entering and leaving the Ports of Auckland rail grid from the yellow gantry

Leading the way yet again in NZ with further hi-tech innovations, POAL has introduced two tools and systems that speed up the container handling process, ensure accuracy and reduce the risk of loss and damage.

The first is OCR – Optical Character Recognition - a camera-based system that photographs all containers entering the port through rail, road and sea and relays the information captured from containers, numbers and ISOs to the port N4 operating system to ensure it all matches with information already in the system.

"We have it at the rail grid where it is eliminating the need for manual box check; we have it on one crane and others will be fitted out over the next few months and in that position its advantage is the accurate specification of the location of the box at each stage of its removal from

the vessel" says Antony de Pont, POAL Manager Gate Operations.

By the end of 2016, he expects OCR to be installed at the Road Gate where he forecasts it will have a highly positive effect on speeding up the entry process, throughput and truck turnaround time with OCR to N4 matching information sparking a green light to enable the truck to proceed immediately to the grid.

Another advance is the introduction of PDS – Position Detection System – an information link between the straddles and the POAL Operating System N4. "It enables the GPS in the straddles to push back information to N4 about the exact location of the straddle throughout the move thereby ensuring operators follow the most efficient pathway to the allocated container position. It also reduces the risk of containers being 'lost' by being placed in the wrong yard position" Antony de Pont explains.

Port Safe and Fit



Health and Safety is a very big deal at POAL where numerous programmes from Reward and Recognition to PortFit, illustrate the commitment the port has to health and safety. In preparation for the introduction of new national regulations next year, POAL's Health and Safety Manager Steve Groenewegen, confirms the port is fully prepared, ready and waiting: " We have a huge focus on health and safety; we've had a high level input into the planning of the new regulations and to the Act just passed. We have very robust systems in place and so for us, the changes are not going to be great.

He points to an adjustment in focus in recent times at the port from hazard management to risk management with high investment into risk management and assessment training. "We've worked hard to engage all staff throughout

the port in Health and Safety; we've introduced programmes like PortFit which was created to reduce injury by strengthening core muscles and keeping fit and that's been very successful with uptake from stevedores and lashers through to management. We also have a Reward and Recognition programme for good safety behaviour and those prizes are definitely appreciated and well worth winning!"

Shipping and Related Appointments

Recently retired from his position as POAL Board Chairman, Graeme Hawkins has been replaced by Deputy Chair Rodger Fisher as Acting Chair. Also at POAL, former Manager of Multi-Cargo, Justin Maddock, has moved up to the position of Manager Commercial Relations replacing Matt Kidman who has moved to Sydney. After 16 years with Fonterra and a close involvement with logistics, supply chain, transport and shipping, the dairy co-op's Strategy GM, Nigel Jones has joined meat

company Alliance Group, in the same role. At its recent AGM, the NZ Shippers' Council re-elected Mike Knowles (Shipping Manager, Zespri International) as Chairperson and announced Blandina Diamond (Logistics Manager NZ Steel) as Deputy Chair. Day to day contact person for the industry is newly appointed Executive Officer Megan Campbell.

Capacity Boost for PIL

POAL customer, the Singapore-based container line Pacific International Lines (PIL) and China's shipbuilder Yangzijiang Shipbuilding, signed a contract in September for the construction of eight 11,800 TEU container ships. These newbuilds will be the largest box ships in PIL's fleet once the planned deliveries start in 2018.

Better Bunkering

Seafuels, POAL's two year old 50/50 Joint Venture with PB Bunkers, has signed a new 10 year charter agreement with Z Energy for the fuel bunker vessel *Awanua*. As the only powered marine fuel oil vessel in NZ, the Auckland-based *Awanua* collects marine fuels from Marsden Point for bunkering vessels both at Marsden Point and in Auckland. Seafuels Chairman Wayne Mills said the long term partnership with Z Energy provides certainty of fuel supply for ships calling POAL. "This is essential for the continued success of the port and meeting Auckland's growing freight demand."

Tripartite Alliance

Ports of Auckland has signed a Memorandum of Understanding with two of the top 10 international ports – the Port of Los Angeles and the Port of Guangzhou. POAL Head of Communications, Matt Ball, says collaboration will include investments, technologies and environmental policies with supply

chain and best practice initiatives. It is a significant agreement for Ports of Auckland which, as NZ's biggest and most efficient container port, claims a 'strong commitment to delivering innovative, efficient and sustainable operations that benefit Auckland and the NZ economy'. The new relationship aligns it with

the largest container port in the US – LA/Long Beach (7.8M TEU in 2013) and with Guangzhou, the sixth largest Chinese container port (15.31 TEU in 2013). The objective is for the Alliance to work together to enhance the capabilities of each port in order to boost their respective regional economies.

*Seafuels Chairman Wayne Mills [right], accepts acknowledgement of the *Awanua*'s last two years in operation without a single lost-time injury*



Saving the Whales

Efforts by Ports of Auckland, the shipping industry, University of Auckland and the Department of Conservation, to reduce ship speed through the Hauraki Gulf approach to Auckland harbour, is helping make life safer for the local population of Bryde's whales. Between 2006 and 2012, 15 Bryde's whales were confirmed killed by commercial shipping in Auckland's Hauraki Gulf with another killed by ship strike in 2014. With a population of an estimated 46 full year residents and up to 159 seasonally resident Bryde's whales in the Hauraki, the Gulf is home to one of the only few resident Bryde's populations. They are listed as 'critically endangered' because ship strike represents the greatest known threat and cause of death.

A POAL issued Protocol in 2013, encourages shipping lines to cut speeds through the Gulf to 10 knots, to follow a recommended route while transiting the Gulf to and from Ports of Auckland, to keep watch for whales and take avoiding action when sighted, to report sightings to POAL Harbour Control.

Harbour Control now reports that the Lines in general have co-operated successfully with the Protocol. Prior to the initiative, ship speeds through the Gulf averaged 14.2 knots. Speeds have since reduced gradually with the average now at 10.93 knots. At the same time, data shows the proportion of ships travelling at low speeds has increased 'significantly' – from 75% of ships travelling at over 12 knots in 2012, to 80% now travelling at 12 knots or under. In the last two years only one ship strike whale death has been confirmed.

Captain John Robinson, President of Shipping New Zealand said "The shipping lines serving New Zealand all strive to operate in a socially and environmentally responsible manner. The industry has got right behind this Ports of Auckland initiative and fully supports the effort to safeguard the Hauraki Gulf Bryde's whales."

Image: Hazel Meadows





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