

Capacity creation is the top priority in South African ports

Transnet Port Terminals, Durban, South Africa

Nowhere in South Africa is the rapid upsurge in economic activity and growth more evident than in its commercial ports. Historically neglected and under-funded prior to 1994, during the country's economic sanctions and apartheid era, South Africa's ports have since been experiencing booming business, and state-owned transport and freight entity Transnet Limited has been at pains to ensure it creates capacity ahead of demand in its busy terminals.

Introduction

Transnet's port operating division, Transnet Port Terminals, has steadily increased its overall investment from a mere R131m in 2001/02 (GBP £10.6 billion) to more than R3.2bn (£259 million in 2008/09.)

The division will now spend R6.5 billion (approximately £528 million) over the next five years on capital investments. These are aimed at reducing the cost of doing business and enhancing its competitiveness as a global logistics player. Approximately 31 per cent of this will go towards increasing capacity, to achieve the company's growth initiatives.

Beefing up box capacity

Capacity expansion programmes are currently underway at the major container terminals in South Africa. In Durban and Cape Town, as well as at the new deepwater Port of Ngqura, which launched to commercial trade in October 2009, such projects will assist in meeting the target of a 32 per cent increase in container capacity over five years, with spare capacity to deal with any growth in volumes. In total, these developments will create capacity of 5.7 million TEUs for South Africa by 2014/15.

Transnet Port Terminals reports container growth will be harnessed through a container hub strategy to develop regional and global transshipment volumes, particularly through Ngqura.

Ngqura Container Terminal

Transnet's R10 billion investment into the Port of Ngqura has produced the most modern harbour in Africa to date, and the Ngqura container terminal has been hailed as a solution to pressure on the country's container sectors.

The Port of Ngqura is an attractive option, given that it is the only port in South Africa able to receive new generation vessels carrying between 8,000 and 9,000 TEUs, with a draft of 16.5 metres.

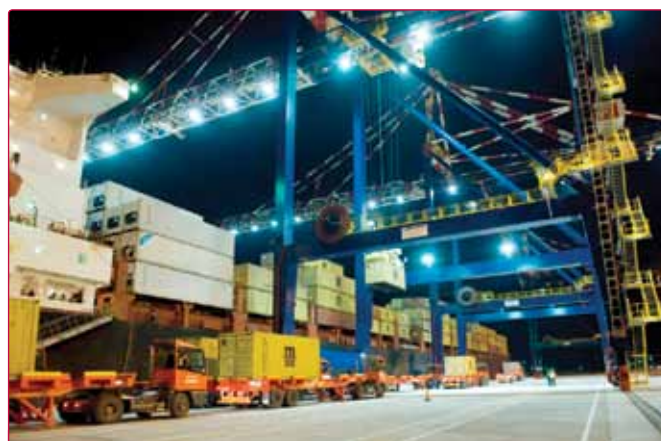
With its high-tech container terminal, the improved infrastructure will help to relieve container congestion in other South African ports and will also attract additional transshipment cargo.

The Ngqura container terminal is being positioned as a hub for the Sub-Saharan Africa region and lies midway between the Americas, Far East and Asia. It opened with a capacity of 800,000 TEUs, but by its end state will boast a capacity of two million TEUs.

The terminal's equipment includes 22 rubber-tyred gantry cranes (RTGs); six Megamax ship-to-shore cranes, two rail-



Ngqura container terminal's rail-mounted gantry cranes with Liebherr ship-to-shore cranes in the background.



The Port of Ngqura has received 40 vessels since its opening at the beginning of October.

mounted gantry cranes (RMGs), two reach stackers, four empty container handlers and 1,680 reefer slots. The Navis SPARCS N4 terminal operating system and the auto gate facility are also in place.

The port also boasts excellent rail infrastructure, with a total of nine lines expected to be available by March 2010. The rail route links the new port to the City Deep rail terminal in South Africa's Gauteng Province via Beaconsfield.

Research has shown that the port will offer increased national trade competitiveness, improved services levels from the port operator, and reduced logistics costs.

Durban Container Terminal and Pier 1

The Port of Durban is the 42nd largest port in the world, with well-established infrastructure and hinterland connectivity and is expected to remain the key contributor to South Africa's container traffic well into the future. It is also home to two of the region's busiest container terminals, the Durban Container Terminal (DCT) and Pier 1.

Investment in the port will continue as the port grows to meet demand. DCT's capacity creation project will realize the terminal's true capacity of 2.9 million TEUs. This involves moving all service facilities away from the quayside to create additional stacking area. Berths are also being refurbished.

DCT has upgraded its straddle carrier fleet and now boasts 30 new CSC440 straddle carriers capable of stacking 1-over-3 high and lifting 40 tonnes. The terminal's R30.6 million reefer point expansion project is complete and has seen reefer capacity increase from 645 to 1,117 reefer points.

The widening of the entrance channel will constitute a new north breakwater and the rehabilitation of the south breakwater. The width will be increased from 121 m to 220 m and the depth from 12.8 m to 17 m, to accommodate 9,200 TEU container vessels.

The truck staging area completed in 2007 consists of 7.3ha of surfacing and can accommodate the staging of around vehicles, moving them off the congestion-prone Bayhead Road leading into the terminal. The rail terminal, built to reduce the significant build-up of containers on the dockside, has also been completed.

The new R125-million autogate to be launched in 2010 will have nine processing kiosks and 27 bays to service vehicles arriving at the terminal.

Pier 1

Phase 1 of the Pier 1 container terminal re-engineering project, which saw the construction of six quay cranes and 14 rubber-tyred gantries, was completed in 2007 at a cost of R1.9 billion. The terminal has a capacity of 720,000 TEUs, with the potential to increase its capacity to 1.5 million TEUs.

The terminal currently boasts six ship-to-shore cranes, 18 rubber tyred gantries and two rail-mounted gantry cranes. Other projects underway include the Bayhead road upgrade, the Island View reconstruction and the upgrading of overhead traction equipment.

Cape Town Container Terminal

In Cape Town, the country's second largest container terminal is undergoing a R5.6 billion expansion programme which will increase capacity from 740,000 TEUs to 1.4 million TEUs by the end of 2012.

The project includes the deepening of four berths, together with the Ben Schoeman basin and refurbishment of the quay wall to accommodate new generation vessels. Old ship-to-shore cranes are being replaced with Super Post Panamax cranes, while RTGs will replace the straddle carrier operations.

The terminal is also being reconfigured to increase stack capacity. Its design capacity is only 340,000 TEUS, so the answer lies with the creation of additional capacity. The additional container traffic at Cape Town is linked to transshipment cargo for areas like West Africa and repositioning of empty containers, brought about by the country's export-driven demand. But the major growth area lies with refrigerated cargo (reefers), which has seen a swing to containerised reefers. In response, a reefer point expansion programme is included in the terminal's expansion project.

Technology

Transnet is implementing the nationwide rollout of the Navis terminal operating system in all its terminals. In March 2009, Transnet Port Terminals became the first port operator worldwide poised to manage Navis™ SPARCS N4 terminal operating system from a central location across 21 marine and rail terminals. To date, Navis is in operation at Pier 1, Port Elizabeth, Cape Town and Ngqura container terminals, with DCT set to follow shortly.

Improving productivity and quality of operations

A container productivity improvement programme commenced at Durban container terminal is now being rolled out to all container terminals. Its aim is to ramp up container moves and productivity



Pier1 container terminal – Phase 1 of the project was completed at a cost of R1.9bn with terminal capacity of 720,000 TEU's. There is potential to increase capacity to 1.4m TEU's.

in South Africa to world class standards, with an initial target of between 26 and 28 GCH. Durban Container Terminal (DCT) has improved from 14.0 moves in 2001/02 to 23.1 in 2008/09, and Pier 1 is now operating at world-class levels. At Ngqura Container Terminal, the average GCH is currently between 22 and 26.

Preventative maintenance and total quality management programmes are now in place to ensure equipment reliability and availability, as well as a renewed focus on customer satisfaction and continuous improvements in all terminals.

Meanwhile, the chief operating officer at Transnet Port Terminals (TPT), Nosipho Damasane, said the division would set up a national planning office to look at all the ports to make them work efficiently. This would look at issues such as the total number of days vessels should ideally spend in local waters, rather than focusing on the different ports in isolation.

For Transnet Port Terminals, and its parent company Transnet, the time has come to maximise hefty capital investments into superstructure, infrastructure, equipment and human capital. The focus is now on studying what the world-class standards are for specific processes in its business, seeing how it measures up and implementing a 'quantum leap' strategy that encourages huge improvements in performance and productivity.



The Cape Town Container Terminal with four of the eight Liebherr ship-to-shore cranes ordered as part of the terminal's multimillion rand expansion project.



Durban container terminal's R1.4 billion capacity creation project includes the relocation of workshops and infrastructure away from the quayside to create additional container stacking area.

ABOUT THE ORGANISATION

Transnet Port Terminals is a division of Transnet Limited, South Africa's state-owned freight logistics and transport company. Transnet Port Terminals provides cargo-handling services at 13 terminals situated across seven South African ports. It serves a wide range of customers including shipping lines, freight forwarders and cargo owners.

Its operations cover import and export operations across the following cargo sectors: Containers, Mineral Bulk and the Agricultural Bulk and RoRo Sector. Since November 2009, Karl Socikwa has been at the helm of the company as Chief Executive.

ENQUIRIES

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