The dark continent is no more

As a consequence of trade reforms and globalisation, the volume of general and containerised cargo moving through Africa’s ports has trebled over the last decade. Between 2000 and 2008, cargo volumes increased by 44 percent across Africa – exceeding the growth of world’s top 100 container ports. While positive for African economies, this growth has compounded port congestion and has illuminated the deficiencies of the rail and road support systems.

At the first (and rather poorly attended) Harbour and Ports in Africa conference (HAPIA), held in Durban from 28-31 March, maritime representatives from across Africa discussed what steps need to be taken to sustain future growth in Africa’s maritime trade.

HAPIA presenters urged the African powers that be to reinvigorate the rail network; to increase the automation of menial port tasks; to establish a hub port and complimentary port pairs, and to create enabling legislation to efficiently deal with the threat of piracy on the increased cargo moving through Africa’s waters.

Growth through infrastructure investment

The motivation to optimise Africa’s ports is part of a realisation that “the dark continent is no more”, to quote Transnet CEO and HAPIA keynote speaker, Karl Socikwa. He pointed out that Africa’s consumption has grown by $275 billion since 2000 – a greater growth path than both Brazil and India. Between 2000 and 2008, the continent experienced a 2.7 percent increase in labour productivity growth and a 2.2 percent increase in labour force growth, resulting in a total GDP growth of 4.9 percent.

According to Socikwa, this growth is “certainly the right direction to be moving in” but not ideal. In order to compete with the likes of China, Africa needs to realise a double-digit GDP growth – particularly through infrastructure investment into the maritime sector, which Socikwa describes as being well positioned to become a catalyst for African trade.

“Infrastructure investment is absolutely critical as investment will bring demand and demand will bring growth,” explained Socikwa. Despite investing a third of its $72 billion annual infrastructure on transport, Africa is currently below global levels of container growth projections. Following the economic crash, investors are hesitant to advance South Africa’s current container growth of eight percent. This is in stiff comparison to China, whose top 10 ports had grown by 21 percent in the first half of 2010 compared to 2009.

The call for a southern African hub port

To stimulate trade development and the double digit growth Transnet wants, Socikwa proposed regional and international “port pairs”. Port pairing strategies can play a critical role in reducing logistical costs in the current economic climate. As Africa’s biggest trading, port pairs should come from the four regions of Asia, Latin America, Middle East and intra-Africa. “This is where growth will be taking place in future,” says Socikwa.

“A South African hub that is paired with Angola and China can create fluidity of traffic within the region and reduce waiting time for vessels coming from the Far East.”

Leading the theme of complimentary terminals is the proposal to create a hub port in southern Africa. Out of the 25 hub ports across the globe, a southern African hub would be the first in Africa and would bring substantial benefits to the continent’s economy, cargo owners and shipping lines.

These include, amongst others, increased shipping line competition with higher service levels; increased maritime connectivity bringing improved access to regional and global markets and improved port efficiency, feasibility, and speed.

Socikwa and a number of other HAPIA speakers pinpointed South Africa’s Ngqura Port as an ideal hub, due to its aggressive growth to date. Although Ngqura’s designed annual capacity is 400 000 containers, the port is already handling approximately 45 000 containers a month.

This has motivated the completion of a stacking facility by the end of 2011, with Transnet wanting to double the port’s capacity in the medium to short term, says Socikwa.

Should Ngqura be established as a hub port and paired with Angola’s Luanda port, areas of cooperation (as outlined by Transnet) would include preferential berthing slots in both paired ports; coordinated vessel plans and coordinated custom processes and systems. “Transnet has engaged the shipping lines, port authorities and terminal operators. The Angolan-SA port pair plan seems favourable to the market as it will reduce freight costs,” said Socikwa.

Updating Durban in line with future growth

While Ngqura holds tremendous potential for future investment, Allan Wijnberg (CEO of consulting port and coastal engineers firm, Prestedge Retief Dresner Wijnberg) reminded delegates that Durban is not without potential in the immediate future.

The proposed creation of a port on the ACSA-owned land of the old Durban International Airport (DIA) will have an estimated GDP impact of R50 billion over the 30 years of its four-phase construction, with a CAPEX job creation of 64 000 and an operational related impact of R55 billion/year. Initial studies predict the terminal will be used as a major cargo (9.6 million TEUs/year) and car terminal, as...
called for the invigoration of the rail network, presenters unanimously like Nairobi.

high congestion around major trade centres or unpaved highways, along with transport to and from ports covers strip the road system is even worse as road to the US' 38 tonnes. In the rest of Africa, tonnes, which is excessive in comparison the legal gross vehicle mass (GVM) of 56 to poor road conditions in South Africa is trucks on the road are unroadworthy. least because approximately one in five involved in 10 percent of accidents – not traffic on South Africa's roads, but are duty trucks make up three percent of African Shippers Council (SASC), heavy freight transport, but is this the effective response that is needed? It has brought increased road congestion and deteriorating roads, costing South African motorists R200 billion per year.

According to Mervin Webb of the South African Shippers Council (SASC), heavy duty trucks make up three percent of traffic on South Africa’s roads, but are involved in 10 percent of accidents – not least because approximately one in five trucks on the road are unroadworthy.

He pointed out that a major contributor to poor road conditions in South Africa is the legal gross vehicle mass (GVM) of 56 tonnes, which is excessive in comparison to the US’ 38 tonnes. In the rest of Africa, the road system is even worse as road transport to and from ports covers strip roads or unpaved highways, along with high congestion around major trade centres like Nairobi.

In response to the negative impact of road transport, presenters unanimously called for the invigoration of the rail network. Rail transport was widely described

The need for additional container storage will also bring infrastructure investment opportunities for Durban’s port - Wijnberg hinted at possible plans to provide such storage by relocating the naval base situated at Pier 1, but this has yet to be found viable.

Efficiency beyond the port: rail versus road

Port development in Durban, Ngqura and across Africa is not curtailed to the sea's edge. The increase in shipping has effectively led to an increase in time sensitivity, explained Andrew Layman (CEO, Durban Chamber of Commerce & Industry), which means that all activity from the port to the end user must be as efficiently coordinated as possible. Therefore any capacity growth in ports needs to be echoed with similar growth in rail and road transport.

There is certainly a rapid growth in road freight transport, but is this the effective response that is needed? It has brought increased road congestion and deteriorating roads, costing South African motorists R200 billion per year.

Advances in technology improve maritime awareness

Speaking at the conference in Durban, Steve Nell of Maritime Data Solutions emphasised the role that technology is playing in improving our ability to see, manage and ultimately control our maritime domain.

With 72 percent of Africa consisting of coastal states and 31 000 km of coastline, Africa’s maritime domain can only be considered vast. Nell points out that more than 50 percent of Africa’s GDP is derived from trade -- a percentage that is only set to increase as Africa’s growth rate improves. Given these figures it is vital for the continent and the coastal states to understand the importance and relevance of available technology for providing the right information to the right place at the right time.

Nell lists the importance of vessel traffic management; port and coastal surveillance systems; automatic identification systems and long range identification and tracking systems as just a few of the solutions available to track maritime awareness.

He also highlighted the very many benefits of using available technology to improve various aspects of safety as well as operational efficiency.

“The maritime domain presents the greatest opportunity for economic growth, but unfortunately also for the growth of illegal activities,” he said emphasising the dangers of not taking control of territorial waters.

“Achieving maritime domain awareness will require international cooperation and the implementation of technology that facilitates the detection, identification, classification and surveillance of vessels, and sharing of relevant information with the right people at the right time,” he added.

“Global supply chains will be more visible and stakeholders can plan with more confidence and exploit more opportunities,” he said explaining that planned future infrastructure will attract vessels that would otherwise not visit our port.

“Transnet has engaged the shipping lines, port authorities and terminal operators. The Angolan-SA port pair plan seems favourable to the market as it will reduce freight costs,” said Socikwa.
as “key to the logistics system” and “the most cost-effective transport”. Webb pointed out that it is already a favoured route between the Durban port and Gauteng, as it provides minimal intermodal transfers.

And yet it only accounts for 28 percent of Africa’s long haul corridors. Across Africa, the lack of an efficient rail transport system is compounding port inefficiency. According to Nancy Kairaria of the Kenyan Maritime Authority, the Northern Corridor in particular is missing vital rail infrastructure in its stretch from the port of Mombasa (Kenya) to Kisangani (DRC) despite being the busiest transport corridor in eastern and central Africa, and despite the Mombasa Terminal currently running at over double its designed handling capacity of 250 000 TEUs/year.

According to Socikwa, Transnet’s response is therefore to match their investment of rail infrastructure with their investment in South Africa’s ports, “to create an integrated infrastructure development”.

Public versus private

But is public investment enough? Layman believes that it is investment by the private sector that will be the hope of a seamless transport industry. He pointed to the Maputo Corridor Logistics Initiative as a good example for the rest of Africa to follow. The Corridor was established by the private sector and is now a private-public partnership (51 percent private).

Webb also pointed to intermodal hubs (that optimise the transition from rail to road) as an opportunity for private investment. As a spokesperson of the SASC, Webb explained that the council is particularly concerned with increasing private investment.

The Council aims to establish a collaboration platform between government and private stakeholders by June 2011. This would provide SASC with the opportunity to address “the real issues between the government and private sector” – of which the SASC represents the owners of approximately 200 million tonnes of cargo.

For the rest of Africa, motivators for private investment are not as forthcoming. Kairaria points out that the Kenyan private sector are “scared away from investment” in the country’s maritime sector by the bureaucratic and lengthy process of implementing development strategies in Kenya.

She highlighted the absence of clear accountability and the lack of interdepartmental strategies as particularly hindering port investment and development.

However, since the implementation of the Kenyan Integrated National Transport Policy in 2010, the private sector has become more willing to invest.

Short sea shipping

Developing almost obsolete rail and road networks in many parts of Africa will certainly be a lengthy process. According to Dr Chinedum Onyemechi (Department of Maritime Management Technology, Federal University of Technology, Owerri, Nigeria) short sea shipping could be a vital partner to optimising rail networks in Africa’s hinterland.

Short sea shipping links logistics activities across ports both between and within nations connected by sea, and is the last link in the establishment of hub ports.

“Short sea shipping ports should be set out as national priority areas by governments in African maritime states, considering its contribution to sustainable transport,” says Dr Onyemechi.

In east Africa, enormous development and networking options exists along the Zambezi and Lipopo rivers. Coupled with existing rail networks, logistics centres can be placed off the lake regions closest to the affected nations’ markets.

In north Africa, the river Nile and its adjacent rail networks form useful infrastructure for the location of short sea shipping ports together with logistics centres in areas that will decongest city traffic. “Short sea shipping ports may also be located along the Mediterranean coasts of Tunisia, Libya and other north African states,” explained Dr Onyemechi, while the West African network has the Senegal, Gambia, Volta and Niger Delta river networks.

“All of these form ripe centres for the location of short sea shipping ports and logistics centres that will serve the market hinterland.” In the Central African sector, barge transportation can be used in the Zaire river network to connect to short sea shipping ports.

Positively policing piracy

While the majority of HAPIA 2011 focused on sustaining Africa’s economic growth through port development and optimisation, delegates’ voiced concerns on the practical impact of piracy on their vessels and African trade at large.

Between 1997 and 2007, 23 percent of pirate attacks occurred off the African coastline – the majority of which were low-level attacks at ports, using guns or knives.

In the last four years, the rate of piracy in African seas has effectively tripled to over 70 percent with the use of heavy duty arms (such as AK47s and grenade launchers) in pirate attacks steadily increasing.

According to Dr Henri Fouche, Department of Police Practice for UNISA, the pirate activity has amplified to such an extent that 20 vessels are docked by force in Somalia at any one time.

Not only are vessels rounding these coastlines having to plan costly trade-route diversions, which will soon increase.