ETHEKWINI MUNICIPALITY

THE DURBAN EDGE

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PART 1: Durban Port at the Crossroads

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CONTENTS **PAGE**

PART 1: Durban Port at the Crossroads

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INTRODUCTION

The Durban EDGE will produce a series of short opinion pieces focusing on the transformation of the South African economy. The first in this series focuses on the Durban Port logistics, which is a fundamental component of the South African economy and is both an enabler and inhibitor of economic competitiveness. These opinion pieces are intended to critique the status quo and provide alternatives in the spirit of building a constructive democracy as well as a prosperous and inclusive economy.

Earlier this year (2021) the World Bank released its "Container Port Performance Index 2020" (CPPI) which set in place a Comparable Assessment of Container Port Performance across the globe. This is the first of its kind in several respects, most notably that it uses independent data sourced from IHS Markit's Port Performance Program which is aimed at driving efficiency improvements in container port operations and supporting programs to optimize port calls. The CPPI rated the Port of Durban at 349 (of 351 ports) using their statistical approach and 351 (of 351 ports) using their administrative approach. These rankings focus purely on the efficiency of the container terminals which will have little to do with the challenges on the inland congestion which relate to getting into and out of the port and its immediate environments. **This opinion does not focus on container handling efficiency and only looks at the back of port and inland freight transport challenges.**

SOUTH AFRICA'S INDUSTRIAL AMBITION

In the globally competitive area of industrial development, supply chain optimisation represents the critical area where firms can become more competitive through both internal and external efficiencies. In this regard South African firms are already at a disadvantage as the country sits outside of the main shipping liner routes which operate east – west and concentrated in the northern hemisphere. However, there are some exceptions to this, such as in the case of Singapore, which while in the southern hemisphere is one of the most globally significant and efficient hub ports. This is due in part to the regional scale in the ASEAN region as well the port's internal efficiencies. The ability of South African firms to achieve world class competitiveness is further hampered by the double negative that the ports that do serve the Southern African region are inefficient as well as expensive[1] . The final death knell to the country's industrialisation ambitions is dealt by the rising electricity costs combined with scheduled outages as a result of ageing infrastructure.

The African continent is very reliant on the productivity of its ports due to the many landlocked countries and lack of integrating roads and rail infrastructure. While Africa has been improving the efficiency of her ports through infrastructural investments and better management, South African ports have been declining in efficiency due mainly to poor decision-making on infrastructure investments, a lack of competition and silo-based planning. This has cost the country heavily as it has increased logistics time and cost while also driving down SA's competitiveness and industrialisation vision.

THE PORT OF DURBAN

South Africa's premier port is the Port of Durban which handles about 70% of the country's containerised traffic and the bulk of its petrochemical supply as well as other dry and wet bulk (such as agricultural produce,

[1] See OECD 2013

oils, etc) and break-bulk cargo. The port services the economic heartland of the country which stretches from Durban along the N3 Corridor to Gauteng and the larger industrial and mining complex concentrated in Gauteng. The N3 freeway is the single route that carriers the majority of SA's cargo and is both a strategic and yet very vulnerable route. Unrest that occurs within the country frequently exploits this weakness by shutting down the freeway and bringing the country's economy to its knees. Other challenges such as frequent accidents or natural disasters often shut down the freeway cutting off the economy from the rest of the world. Despite this, while there have been many development initiatives in the country, in the last 20 years none have played any meaningful role in improving freight efficiency between Durban and Gauteng. The 21st century is littered with acronyms of initiatives that sought some incremental improvements but fell far short of even that.

The majority of freight coming to and from the port is handled by road following the deregulation of road freight and declining use of rail. Attempts to re-introduce rail as a viable option have failed, and rail is unlikely to ever become a viable alternative as most de-stuffing and cargo re-configuration happens in Durban followed by the door-to-door shipment of cargo to Gauteng by road. This is both more convenient and more efficient for the private sector than going through rail interchanges, junctions, and intermodal facilities. Hence rail will continue to play a small role as it is limited to handling (bulk) cargo that is more suitable for rail.

NATIONAL TRANSPORT PLANNING

In most countries the national transport masterplan is developed by the department of transport and includes passenger and freight transport, ports, and airports. In South Africa national transport planning is more complex. While the Department of Transport has the constitutional role of national transport planning, the rail and ports freight transport sector is owned and operated by a state company which has monopoly over the ownership, operations, and planning of freight infrastructure, and wields substantial political muscle to direct and control the freight sector. The result is a predominance of road freight and conflict between public interest, industrial competitiveness, and the state which holds the monopoly in rail, ports, and pipelines. The resultant policies and planning that favour this state monopoly are a recipe for inefficiency and an inhibitor of economic growth.

South Africa's most competitive general cargo port is the port of Durban. Apart from its handling capabilities the port is well positioned to serve the industrial complex of Gauteng and the regional industrial and agricultural hub of KZN. Following the rapid growth of container volumes at the port of Durban in the early 2000s, the port was poised for substantial investment to improve its handling capabilities. After reviewing several options at the port of Durban and environmental objections, Transnet chose to direct substantial investment into the Port of Ngqura in the underdeveloped province of the Eastern Cape. What the decision lacked in economic, and demand led reasoning, it made up for in political rationale. While the region lacked an industrial base and was further away from the major economic centres of the country, the project was positioned as a catalyst for the future development of a (currently weak) industrial base. History is strewn with numerous such port developments, the majority of which are unsuccessful. It should be noted that there are conditions under which such developments could catalyse local economic development (which is not the focus of this paper). However, it must be noted that the future of the Port of Ngqura, despite centralised planning and monopolistic allocation of traffic, lies only in servicing its regional economic base.

20 years after the economic boom which started the rapid rise in container volumes at the Port of Durban, there has been little in the way of strategic

interventions to improve efficiency and address the freight movement between Durban and Gauteng. While the entrance of the port has been widened and deepened to handle the larger modern vessels, the necessary berth deepening to support this has followed a slow and protracted process salvaged only by the lack of pressure from a stagnant economy. This has essentially excluded the port from handling the modern (larger), fully laden vessels and contributes to its inefficiency.

DISINTEGRATED MANDATES

Most modern efficient ports are supported by vast road and rail infrastructure with substantial volume capacity to service the swift functioning of the port. In the case of South Africa in general and Durban in particular, freight planning has happened in a silo fashion with each party looking at their specific piece of the puzzle, without any higher integrating authority. This is characterised by the following:

TRANSNET

- Transnet which owns and operates the ports and freight rail undertakes planning internally and without any overt participation by stakeholders. Typically planning happens within the organisation and is highly guarded. Once the organisation has come up with a plan it then shares map/s with stakeholders and the City which typically only reflects changes in land use. National industrial port customers are regarded as secondary stakeholders rather than the core reason for the port's existence. Such plans are typically unaccompanied by any or no economic or social justification or shared documentation. The latest port plan posits the relocation of the petro-chemicals sector to Richards Bay. This is not supported by any economic, financial, or business rationale and whilst it will have a catastrophic impact on the Durban economy, there is no consideration given to this. Moreover, little thought has been given to the cheaper and more efficient alternative of relocating the petrochemical storage tanks from inside the port, to unused land closer to the refineries (given that the tankers do not enter the port in any event but discharge their oil at the Single Buoy Mooring offshore from the refinery). Premier ports

"The current booking (truck scheduling) system serves to limit the number of trucks calling at the port and hence reduce congestion, but it does not address the fundamental issue of port inefficiency which causes congestion in the first place."

not only contain efficient container terminals, but also serve the needs of complex economies, of which petro-chemicals and its corresponding downstream industries are an intricate part.

- Since the trucking (logistics) industry is of no material concern to the SOE (as it does not own the road network and regards it as a competitor to railways) the intake and handling of trucks at port terminals is limited to what is deemed manageable through the booking system. **The current booking (truck scheduling) system serves to limit the number of trucks calling at the port and hence reduce congestion, but it does not address the fundamental issue of port inefficiency which causes congestion in the first place.** In short, there is both no reason nor gain to drive efficiency or improve the facilities to expedite loading of containers onto trucks. The recently proposed development of a container terminal in the Point area will serve to direct increased freight transport through the roads in the heart of the inner city and congest the CBD while destroying residential, commercial and office real estate which will be converted for warehousing and truck staging. This also conflicts with the Metro aspirations to redevelop the Point area free non-recreational port activities, which requires the Ro-Ro and MPT terminals to move to the southern (Bayhead) port precinct, rather than increase activity.

- The broader consequences have no bearing on port operations and hence find no place within the financial accounting of costs and benefits of decision-making by the SOE. This critique intends no negative aspersions on the Transnet entity, as its decision making is in its own very legitimate financial interest and brings a return to its shareholder. Hence, it is argued that the consequence of inefficiency and lack of integration with the broader economic and spatial goals, is primarily a consequence of structure which results in poor planning and decision making.
- **Transnet Freight Rail** owns a parcel of land that is well over 250ha in extent, which abuts the port (at Bayhead) in an area where land for port use is in dire shortage. The property is largely unused and includes non-port related activities which could be relocated inland. The land is required for the logical expansion of the port, (as planned in 2015) and could be used in the short and medium term to solve the truck congestion in the back of port area. **The land has remained disused for the past 20 years while a crisis brews for the country, as port operations become slow due to lack of spatial capacity and roads are congested. Here again, the broader public interest (and those of the country and economy) finds itself as being sacrificed for the individual (organisational) benefit.** The primary obstacle to port expansion is the sole port access via Bayhead road. Solutions therefore require alternative access to the bayhead precinct of the port.
- **SANRAL.** The state-owned road transport developer and operator plans for national traffic to and from the major cities and provinces. It is not responsible for the secondary road network that services economic activities within the cities as this function is further disaggregated between the Province and the City. The National Roads Agency is concerned with the upkeep and expansion of national roads to handle traffic that moves between provinces, linking them into the city road network. Despite the obvious requirement, planning for port traffic and integrating planning with the ports volumes and port projects have never featured as a prominent part of SANRAL's plans. Despite the fact that road-based freight transport over the 500km distance to Gauteng makes business sense, it does not benefit Transnet's rail ambitions to integrate planning with SANRAL or meaningfully support national road transport planning. Transnet's aspirations to expand railway operations despite lack of capacity, is used to leverage influence over the national transport planning system to support its interests and strengthen the long-standing monopoly despite the recent Presidential announcement of opening access to private train operators.
- **KZN Provincial Department of Transport.** While the KZN DoT plays an active role in planning for the road transport infrastructure in the province, it has little influence over freight planning or development. It is further burdened with the responsibility of extending the quality of the road networks into rural areas as well as the costly upkeep of the provincial road network. It therefore has little financial scope to undertake large-scale new infrastructure projects.
- **EThekwini Municipality.** The eThekwini Metro develops and maintains local roads and its road network is intermingled with provincial roads due to urban growth. This creates a complex network of differing standards both in development and maintenance. The City has undertaken back of port and freight planning which is generally incremental in nature due to the high cost of holistic solutions. The City does not have either the mandate or the financial capability to develop an appropriate feeder access into the port. It must be recognised that City management cannot commit to the creation of freight corridors to be paid by ratepayers and that this must necessarily be a national function.

The net effect is that none of the agencies, government departments or municipalities have either an overall plan nor the financial backing to develop feeder road infrastructure into/out of the port capable of supporting long term future industrial growth and import-export competitiveness of the country and region. The result is the lack of coordination of plans and long term visions and planning systems that serve the range of individualistic (organisational) agendas. There is no effective integrated vision of an expanding, efficient, and developmental 30-year port logistics plan for the City, Province, and national economy.

LAND SIDE TRANSPORT PLANS

Plans developed by the municipality and Transnet which seek to upgrade a set of road linkages between the port and the N2 are at best a short-term incremental solution. The appointment system employed at the port as well as the proposed truck staging areas, seek to manage and control the number of trucks coming into the port and city, and thereby limit congestion. However, they do not address the fundamental issue which causes congestion in the first place, that being the inefficiency of the port to handle greater throughput and more trucks. Hence such systems are merely filters which place a band aid on a problem that requires major surgery.

Modern ports have vast freeways flowing into/out of the port which are supported by efficient operations in the port to service both the ship cargo loading/offloading and the trucks loading/offloading. Current solutions are wholly inadequate and will serve to slowly suffocate the Port of Durban and result in the country losing freight volume to and from Zambia, Botswana, DRC, Lesotho, Malawi, and Zimbabwe in the next 10 years. The port of Walvis Bay (and others) are increasing their handling and regional linkages and port and corridor developments at Maputo, Nacala and in Tanzania threaten Durban's position on the eastern seaboard. The plans presented as part of the port decongestion are at best temporary solutions to what has become a chronic problem, festered by the lack of overarching, planning for market conditions. Current planning fails to recognise the recommendations and projections of previous studies and the fact that current inefficiencies are occurring at South Africa's depressed level of GDP. Failure to initiate urgent action will throttle any future manufacturing and agricultural industrial growth due to logistics costs and inefficiencies. This poses a threat to South Africa's economic recovery and will nullify the benefits of the ACFTA. It also presents the risk that other African countries will reap the benefit while SA's restrictive planning stifles the economy.

PROPOSALS

A previous infrastructure solution proposed the development of an elevated freeway providing direct access from the N2 into the port. This was abandoned due to the cost, in favour of a more incremental set of linkages between the port and N2. The elevated freeway concept posed advantages which have been lost in the later proposals, which suffer from the same limiting factors of heavy congestion on the roads between the port, the cargo handling depots and the N3 corridor. The elevated freeway concept provided more direct connection into the port and could handle greater volumes as it brought the possibility of having 6-10 lanes going into the port with multiple gates operating and quicker turnaround times. It must however be noted that none of the road proposals offer any improvement to port performance and in fact limit port expansion. Staging areas for trucks are a necessity for efficient logistics but the spatial requirements are aggravated by poor scheduling and inefficient port operations. The alternative to an elevated freeway and further development of city streets should be a freeway via R603 and Prospecton with overhead or tunnel under the Bluff to provide a direct access to the bayhead precinct, as an alternative to the currently congested M7-Bayhead road corridor. While both options are expensive, they will provide KZN and the country with a far superior maritime logistics future and potential for industrial expansion, and will bring significantly greater economic and financial returns to the country than the incremental approach.

Instead of relocating the petrochemicals industry out of eThekwini which will be very costly, requiring development of new pipelines, storage, and completely new refineries (which could result in disinvestment), and destabilising the country's fuel supply, the storage facilities inside the port at Island View could be relocated closer to the existing refineries. The SAPREF site has sufficient capacity to house storage tanks as well as the areas around the old airport. As most fuel distribution to the KZN province, Eastern Cape and Eswatini is done from Durban by road, this will relocate the very significant fuel distribution operations away from Island View thereby reducing congestion in that area and improving safe transport of dangerous goods. This relocation should be integrated with the development of the old airport site into a large privately financed container freight logistics centre with road and rail connections.

The country should look at the potential for development of the R603 which is currently a provincial route which extends from Isipingo/Prospecton through eThekwini to the N3 at Umlaas Road. The route will link to the proposed Pietermaritzburg bypass which will further reduce the conflict between passenger and freight transport and provide a much-needed alternative to the busiest section of the N3 (Durban-Pietermaritzburg). In addition, the route will open up industrial opportunities in the Ingonyama Trust areas to the south of the city and in neighbouring districts which are currently characterised by extremely high unemployment. The construction of an elevated or tunnel direct route via the South Durban basin to the bayhead precinct will also permit development of logistics space on the old airport site and provide the potential for more efficient and resilient land side logistics operations at the port. The development will enable economic growth, industrial development, employment, and will benefit the ACFTA by guaranteeing an expanding, efficient, port of Durban as the container hub in the Southern hemisphere.

How can we achieve this?

South Africa's industrial ambition is hamstrung by disintegrated planning, obstruction of private industrial initiative and investment, inefficient port and logistics systems and self-serving monopolies. This paper does not address the implications of the monopolies, which will be tackled in another of this series of papers. The critical issue here, is how to get the different arms of government to not just work together (which they have done) but working in sync to make their contribution to building something that is beyond each of their mandates. It is also essential that the current national planning of the NIP and SIP programmes must recognise and include the critical needs of the Durban logistics crisis and prioritise the required investments before a number of projects far less critical for national economic revival.

The first option is to create a single vision for freight logistics which is based on customer supply chains linked to the global economy, and which is not controlled by any monopoly interests, and then to implement it using the different arms of government. This has been shown not to work as e.g., no one entity will fund or build a combined extensive freeway and port development, hence the planning itself is scaled back to what is within the mandate and financial scope of the different organisations as separate entities. While it is in the national interest, it is not the clear mandate of any group. In this scenario, funding will have to come from the national fiscus as part of a strategic infrastructure funding, and then implemented by different the agencies.

The alternative is to create a special purpose vehicle (SPV) which is owned and funded proportionately by all the parties (SANRAL, eThekwini, Transnet, DoT, KZN) and may include a significant contribution of PPP funding from private sector development organisations and international donor agencies. Such a SPV would plan the most optimum solution and raise capital from the national fiscus as well as contributions from each of the parties. These contributions could serve as collateral for raising debt financing from development finance institutions. The resultant infrastructure would belong to this SPV and be owned and maintained by it, through allocations as a state company, contributions by the parties as well as commercial ventures. Such commercial ventures could include the development of industrial areas on land, currently owned, but not used by SOEs, privately owned agricultural land and traditional authority areas (land will have to be purchased for developing the road, and since traditional authority land is generally undivided, this would include substantial tracts of land). This could be done through JVs with the Ingonyama Trust as well as other commercial ventures such as tolling as well as the concessioning of truck stops, service stations, retail nodes and roadside advertising. The increased rate base of the eThekwini Metro will be an additional benefit in servicing the new industrial areas.

The objective of this brief opinion piece is to understand the higher-level drivers of inefficiency and briefly propose policy shifts that could bring about an improvement. This paper does not address the detailed pipeline of infrastructure projects or operational issues that hamper port performance but presents a more strategic argument using the Port of Durban as the fundamental point of departure.

The opinions expressed are those of the authors and do not necessarily reflect those of the eThekwini Municipality or any other grouping or organisation. The Durban EDGE, the authors and the eThekwini Municipality accept no liability for decisions taken as a result of this opinion piece whatsoever, and do not attest to the accuracy or validity of the information and opinions provided.

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