

# THE ROLE OF COASTAL SHIPPING WITHIN SOUTHERN AFRICA'S TRANSPORT INFRASTRUCTURE

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## **THE ROLE OF COASTWISE SHIPPING**

Coastal shipping performs a strategic role both as a provider of domestic inter-port transport services as well as a regional facilitator of international trade. It provides pricing stabilisation between the respective modes of transport without reliance on legislative protection or fiscal subsidisation.

Coastal shipping competes directly with road and rail in a highly competitive environment. It differs to foreign trading in that the cargo has immediate alternatives of road or rail if shipping delays are experienced, or if service levels are deficient.

Coastal shipping is efficient in terms of capacity utilisation and its abilities to convey large volumes in short time frames. It is more fuel-efficient than road transport and helps to reduce congestion on, and damage to, the road infrastructure. Coastal shipping has the flexibility to expand or contract its capacity in accordance with freight requirements without infrastructure development or under utilisation.

Coastal shipping is environmentally friendly and conveys cargo via a free highway, which requires no maintenance. Coastal shipping is subject to stringent safety requirements that are rigidly enforced by regulatory activities, whilst wide spread illegal overloading by a sector of the road transport industry destroys infrastructure and distorts competitive trading. The payload increase from 48 to 60 tons in 1996, resulted in a significant switch of cargo from both rail and coastal shipping to road. Recognised as one of the highest payload allowances in the world, it continues to be fiercely debated, as does the under funding of the maintenance and development of the road infrastructure.

Unlike most maritime nations, South Africa has never had protective cabotage legislation in place to reserve coastal cargo for the South African shipowner. Neither has the South African maritime industry been awarded fiscal incentives for the development and retention of national fleets to ensure its longevity. The national sea transport sector has largely been left to its own strategic capabilities to counter competitive forces, both regionally and globally.

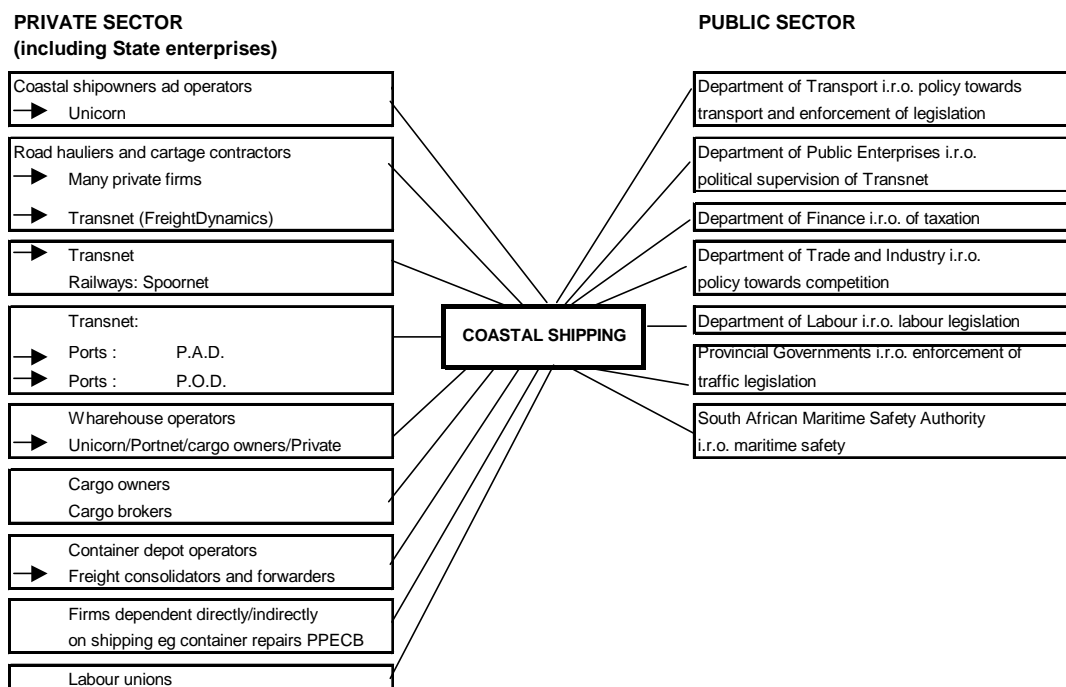
Unfortunately coastal shipping is an often misunderstood mode, and hence an ignored component of a country's national transport infrastructure. In a country such as South Africa with a coastline of some 3000 kilometres of maintenance-free highway, it is a transport mode overlooked at our peril. Its profile needs to be raised considerably to ensure that it receives the necessary protection it deserves.

The South African shipping industry has been centre to vigorous change this past decade - markets have globalised, competitive structures have been heightened, customer pressures have changed and the need to produce higher financial returns has escalated.

Thus, in order to maintain a competitive profile, coastal shipping has had to re-invent its position, achieving this solely on its ability to produce cost effective, efficient and value added transport services. It has, by necessity, altered its business from within an unregulated port-to-port cargo carrier to an integral freight management conduit for local, regional and international supply chains.

Consequently, the inter-relation and economic contribution to the private and public sector from coastal shipping has seen considerable change and growth within the stakeholder base over the years. The stakeholder structure of the coastal market for transport between the commercial ports of South Africa is illustrated in Figure 1.

**FIGURE 1: COASTAL SHIPPING MARKET AND MAIN PARTICIPANTS**



## SUPPLY CHAIN

Today's changing market place requires a supply chain that is flexible and quick to convert problems into solutions. This demands that every link in the supply chain be fully integrated, effectively managed and ready to respond to the business dynamics of the market place. It is becoming more apparent that businesses no longer compete against each other for recognition in non-core activities but rather that supply chains need to compete in terms of efficiency.

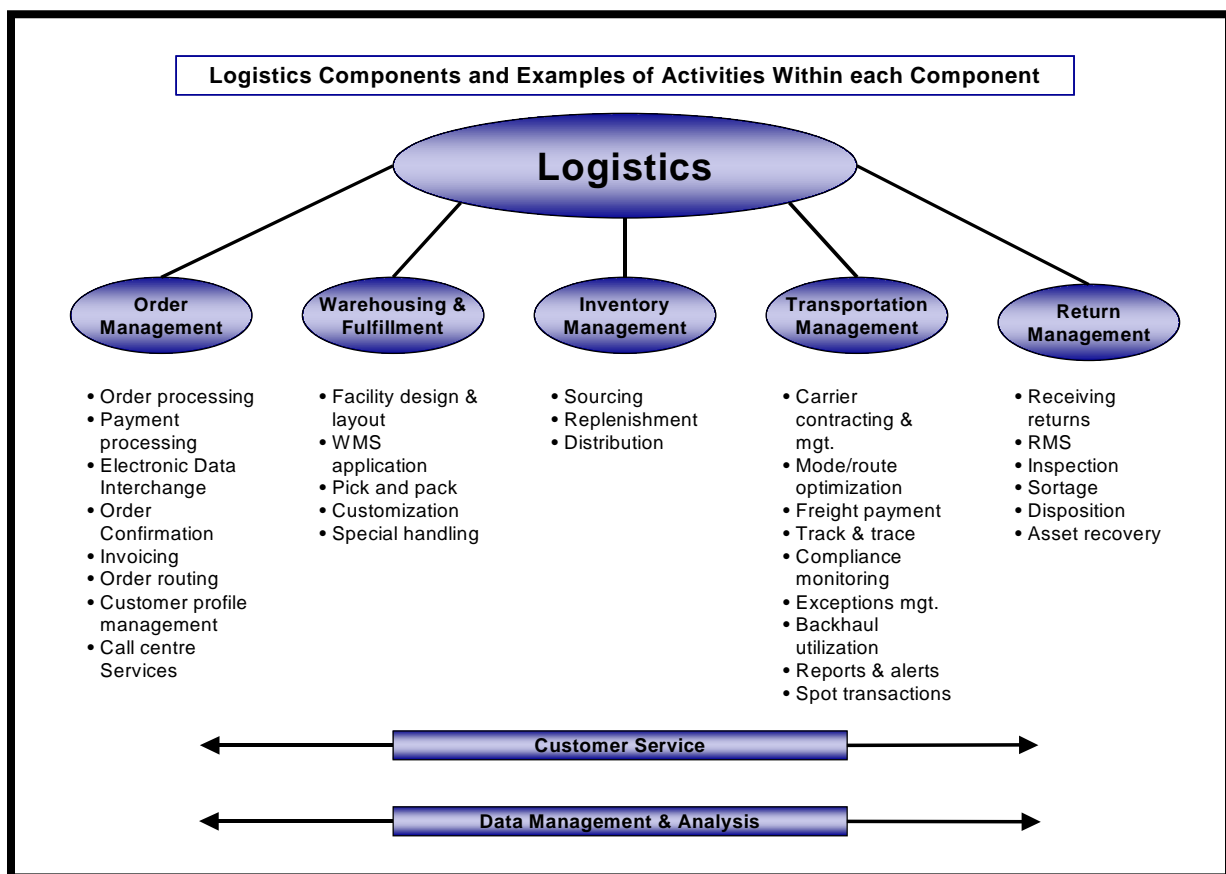
Just as corporate America has experienced a tidal wave of supply chain change, so has South African companies re-defined their expectations. Progressive companies expect supply chain service providers to compliment the image of who they are, how they function and where they are positioned. At whatever level it is viewed, Customers are demanding more, at less cost and with increased efficiency. Supply chain today is clearly no longer the simplistic storing of goods in a warehouse and subsequent distribution to Customers. It is instead, an integrated matrix of processes reliant on multiple inter-dependent resources, and demanding of efficiency optimisation.

By illustration, we are often too keen, as perhaps an individual supplier with the supply chain, to adopt a strategy of “push” logistics. In other words, we conclude our role as best we see it, by pushing the product into the next leg in the supply chain, regardless of the consequences in efficiency and cost. Delighted we are to have fulfilled our role; the quicker we rid ourselves of the product. Rather, we should be optimising the efficiency and cost of the supply chain by adopting a very firm and cohesive strategy - one of “pull” logistics. By, pulling the product through at the desired rate, collective value is delivered to stakeholders. Supply chain efficiency creates a competitive advantage.

As companies look to outsource more of their logistics processes as a system, and as the technical demands of logistics outsourcing increase, the demands on service providers will grow increasingly complex.

As shown in the Figure 2 below, providers of a logistics outsourcing service require access to a number of different skills. To address this need, tremendous value will be found in partnering with complementary service providers. Partnerships and alliances give service providers access to the skills and capabilities they need to deliver quality services, while allowing them to remain focused on their own specific core competencies.

**FIGURE 2**



It is true to say that, Coastal shipping will degenerate into an economic disbenefit unless it, and its Suppliers within the supply chain, collaborate to provide competitive services that add value to the business.

By further comparison, in 1989 a total of 1,43 million tonnes was shipped coastwise, eroding by some 41% to 845 000 tonnes in 2001. Much of this market share loss is attributable to competition from foreign wayporters, rail and, more significantly road. As a consequence, Coastal shipping has by necessity had to re-invent its product and service deliverables in an effort to ensure its survival.

## **THE LOGISTICS PIPELINE**

Research has tabled that Carriers unprotected by regulation cannot differentiate themselves on price alone. Successful transportation companies must provide prompt pick up, inter-mediary warehousing, excellent customer service, simplified information flows, the use of integrated e-technology and swift, complete and damage free delivery to the end user.

In accordance with growing Customer needs, the freight transportation industry has undergone revolutionary change in the past decade seeing:

- Shipping lines extending their business to include landside activities and positioning themselves as strategic 3<sup>rd</sup> party logistics providers
- The motor carrier industry forging a critical link in a multi modal logistics system, whilst competing against time and service
- Road freight carriers scaling up their less-than-truckload transport options
- Parcel carriers increasing their maximum shipment weight

In practice, the organisation of South African industry today, is far from executing effective Just-In-Time production and delivery, and entirely eliminating inefficient inventory costs. In the meantime, the need for interim warehousing in the supply chain is destined to grow. Consequently, the door-to-door carrier relying on the economies of scale of sea transport, has little option but to incorporate warehousing and distribution of individual consignments into its product. As an effective mechanism to support this need, the most economical location for warehousing is considered to be at the place of load or discharge in the ports.

The main purpose of warehousing coastal cargo at the port of discharge in particular, is to overcome the problem of providing rapid delivery of consignments. In South Africa where orders may take a long time to accumulate before production runs become worthwhile, localised warehousing will prevent the loss of custom because extended transit times will be avoided. In essence, the ship and the warehouse will constitute an extension of the stock room of the Supplier or the Consignor.

## **SCOPE**

The scope of domestic and regional sea transport will depend largely on the choice, scheduling, operating and pricing efficiencies of its hardware, but more importantly, the value added role it offers to the logistics chain and its Customer base.

Coastal door-to-door services provided are necessarily inter-modal and comprise the transport chain involving sea and land transport, usually through single terminals at each port.

There are users of coastal shipping willing to make their own arrangements for the conveyance of cargo to and from the ports, as well as adapt their inventories and cargo quantities to suit coastal shipping schedules. However, most users, and more in the future, will require the door-to-door transport of cargo, and localised warehousing, in quantities suited to changing Consignee needs.

The integration of domestic shipping with warehousing and distribution through alliances, would comply with the modern concept of the functions of Coastal shipping in the supply of logistics, and conform to trends elsewhere.

Research undertaken to identify transport needs, indicates that an estimated 64 000 teu's (approximately 1, 28 million tons) could be attracted through the supply of integrated warehousing and shipping mechanisms. Major commodities identified are reflected in Table 1.

**TABLE 1: CARGO POTENTIAL THROUGH EXTENDED LOGISTICS SERVICES**

<b>Cargo</b>	<b>Potential TEU's</b>	<b>Need for Warehousing</b>
Paper	20 000	To optimise distribution
Sugar	25 000	To optimise distribution
Drummed lubricants	3 500	To benefit from transport economies of scale
Liquor Pre-packed	6 000	To benefit from transport economies of scale
Provisions	4 500	To provide small delivery consignments
Bulk grains	6 000	To optimise distribution
<b>TOTAL</b>	<b>64 000</b>	

## **RECOMMENDATIONS**

Considerable potential exists for coastal shipping and its strategic role in the logistics chain by:

- providing buffer warehousing within the ports or its close proximity's
- supplying freight consolidation and dispersal options at those premises
- acquiring, or integrating services with other transport modes
- entering into operating alliances with enterprises able to supply those services
- optimising the efficiency and cost of the supply chain by "pull" logistics
- optimising the use of information systems and technology
- obtaining port authority flexibility in respect of coastal cargo to complement the unique features of this industry
- creating governmental awareness and focus for coastal shipping and its benefits

## **CONCLUSION**

In conclusion, it is notable the extent that coastal shipping is currently participating in the logistics chain. It's success in attracting an additional 80 000 tons per annum in the past year to the sea route through its logistic capabilities is but one example of the potential growth within this industry. Regional socio-economic benefits have naturally evolved through resultant job creation, and opportunities exist for further expansion into black empowerment initiatives.

In closing, I hope this paper has clarified the often misunderstood and neglected role of coastal shipping, both in the supply chain and the national transport infrastructure, and that its consequent potential may be highlighted in the conference resolutions.

## **REFERENCES**

Karsten, B & Gensterblum, G., Studying the Path Towards Logistical Excellence.

Symbol Technologies., White paper - The Logistics Pipeline

D. Hunter - Key Trends in the Logistics Outsourcing Market Place

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**Dave Rennie**, Chief Executive at Unicorn Lines, has played an active management role in the evolution of one of Africa's leading shipping companies.

With 23 years of experience in the shipping industry, he has been thoroughly exposed to and involved in all aspects of shipping resulting in an excellent understanding and working knowledge of the requirements of ship owners, ship operators, charterers, shippers, importers, exporters, warehousing, transport and allied industries.