# THE MARITIME INDUSTRY IN SOUTH AFRICA

# AN OPPORTUNITY FOR LOGISTICS ADVANCEMENT IN THE BULK EXPORTS

"Having a sound transport infrastructure and services is one of the basic tenets of development. Countries need well-planned transport facilities to maintain a viable economy, so that goods, services and people can be transported within and outside the country in an efficient and accessible manner. "International Finance Corporation

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#### **ABBREVIATIONS**

AEC African Economic Community

DWT Deadweight

EU European Union

UN United Nations

UNCTAD United Nations Conference on Trade and Development

FDI Foreign Direct Investment

FoB Free On Board

GDP Gross Domestic Product

GDIF Gross Domestic Fixed Investment

GNP Goss National Product

IMF International Monetary Fund

IVS Island View Shipping

LDCs Least developed countries

MENA Middle East and North Africa (region)

NEPAD New Partnership For Africa's Development

WTO World Trade Organisation

NPA National Ports Authority of South Africa

OAU Organisation of African Unity

OECD Organisation for Economic Co-operation and Development

PGM Platinum Group Metals

RSA Republic of South Africa

TISA Trade & Investment South Africa

SSA Sub-Saharan Africa

USA United States of America

#### INTRODUCTION

Endogenous growth theory considers that gaps in the endowment of ideas and in the limited capability of developing countries to absorb new knowledge are the main reasons for lack in prosperity. This means that development policy in these countries should concentrate on the interaction between technology and skills with a view to facilitating the reduction of this gap.

One of the main opportunities of globalization, i.e. the integration of national economies, is offering developing countries better access to markets and technical advances in developed countries. This integration, it is said, would help to reduce the technology gap and to raise the level of total factor productivity and per capita income in developing countries. This means that globalization can ignite a virtuous circle of skills accumulation in technological and high value services.

The interdependence between globalization, technology upgrading and skill accumulation is determined by several factors, and a full specification of these mechanisms is beyond the scope of this document.

Fundamentally, South Africa is a bulk export country given the volume handled across its various ports. Central to this document is the question of what opportunities can be exploited in the logistics of bulk cargo exports in South Africa.

In the following pages, an assessment of the extent to which bulk cargoes (can) play a role in the development of the local logistics industry and its (potential) contribution to the RSA economy.

The document sets out with a global view of economic and seaborne trade developments. A brief analysis is performed in this section followed by a detailed and focused examination of Sub-Saharan Africa (SSA) in particular the Republic of South Africa (RSA).

The section on South Africa will focus at the following areas;

- A general view on the RSA economy
- The transportation sector
- The maritime sector
- Bulk exports.
- Institutional capacity needed to meet logistics objectives

Several points emanating from the above topics are examined with specific attention to the main cargoes exported and corresponding resources in terms of transportation infrastructure and services. The conclusion will consist of policy and practice proposals that could further the development of a strong local bulk logistics sector thereby positively impacting the RSA economy.

#### THE WORLD ECONOMY OVERVIEW

Following the 1998 global economy slowdown, slow 2002 saw growth in world output with 2000 having accelerated to 3,8% making it the highest in growth in a single year that decade. This type of annual average however does not immediately reflect the imbalances that occurred during the different quarters, and /or regions. Therefore, close analysis of the developments is needed in order to arrive at a reasonable position about world trade matters.

During the first half of 2000, world economies continued the recovery started in 1999, fostered by increased exports from Europe and East Asia and strong demand in North America. By the end of that year demand in North America and Japan became less firm due to persistent weaknesses in equities markets and increased crude oil prices.

China achieved the highest growth at some 8.0 %, countries in transition enjoyed a 5.6 % growth whilst Asian developing countries had 6.2 % growth over that same period. In China the rapid growth in the construction and manufacturing sectors more than offset the slow growth in agriculture. A rebound in foreign direct investment also contributed to the good performance. (World Bank Report 2001)

In transition economies, a flexible business sector was able to take advantage of the currency depreciation and fostered exports and replaced imports with domestic production. There was also some recovery of domestic demand.

Developing countries in Asia performed above world average. Countries in East Asia demonstrated a complete recovery from the 1998 currency depreciation by increased business investment and private consumption in the wake of good export performance. Doubts started setting in with regards to sustainability of these economies given the increased crude oil prices and reduced demand from North America.

The performance of other developing countries was less uniform. Countries in Africa and Latin America performed below the world average. African oil exporting countries, such as Algeria, Libyan Arab Jamahiriya and Nigeria, benefited from increased oil prices. The reverse occurred in oil importing countries, some of which were also affected by natural disasters (e.g. floods, drought) and armed conflicts.

Similar disparity was found in Latin America. Performance was better in Mexico, Chile and countries in the Caribbean Basin, which benefited from increased oil prices and strong demand from abroad, notably from North America. Brazil achieved good recovery from its crisis and achieved 4.0 per cent growth the same as the world average.

The downturn in the United States economy that commenced at the end of 2000 were exacerbated by the 11 September events. Growth in the Euro zone has also slowed down considerably with a sharp rise in unemployment. Japan, following a year of negative growth, is faced with prospects of a prolonged recession in for the rest of 2002.

The growth rate of industrial production in major developed and emerging-market economies, the best available global indicator of cyclical movements, has been negative since the middle of 2001 (see **Table 1**).

World financial markets are still unsettled. The quick and forceful reaction of the world's most important central banks after the events of 11 September achieved its objective of ensuring the continued functioning of major financial markets.

Table 1.
OUTPUT GROWTH IN SELECTED DEVELOPING AND TRANSITION ECONOMIES, 1997–2002

(Percentage change over previous year)

2002 forecast 1990- Economist 2000 Intelligence 1997 1998 1999 2000 2001 **IMF** Region/economy average Unit 5.3 1.1 3.4 5.4 2.1 Developing economies 4.3. 4.4 Developing economies, excluding China 4.7 -0.0 2.7 4.9 1.1 3.6 Latin America 5.2 1.8 -0.2 3.9 0.4 2.9 1.7 Of which: Argentina 8.1 3.9 -3.2 -0.5 4.7 -8.4 -3.8 -1.1 Brazil 3.2 -0.1 0.8 4.5 1.7 2.2 2.5 2.0 Chile 7.4 3.4 5.4 6.0 2.2 3.0 -1.13.1 3.4 2.4 Colombia 0.5 -4.3 2.8 1.5 2.0 2.4 3.4 0.4 2.3 Ecuador -7.3 5.2 1.5 4.1 3.8 Mexico 6.8 4.9 6.9 3.5 -0.3 2.8 1.4 1.2 Peru 6.7 -0.4 1.4 3.6 0.1 3.7 3.0 3.7 4.9 4.6 -3.2 Uruguay -2.3 -1.1 3.1 -2,5 Venezuela 6.4 -0.1 -7.2 3.2 2.7 1.5 -1.5 1.8 Africa 3.0 3.2 2.7 2.6 2.7 2.2 3.5 Of which: Algeria 1.1 5.1 3.3 2.4 3.0 1.4 2.8 3.4 Cameroon 5.1 5.0 4.4 4.2 5.5 1.0 4.8 Côte d'Ivoire 6.6 4,5 2.8 -2.6 -0.9 2.9 3.0 Egypt 5.5 5.6 6.0 3.2 2.5 3.3 3.9 8.0 Ghana 4.2 4.7 4.4 3.7 3.9 3.9 4.3 4.0 Kenya 2.1 1.6 1.3 -0.3 1.3 1.7 1.4 1.4 Morocco -2.2 6.8 -0.7 -1.2 5.0 2.0 3.0 4.4 Nigeria 2.7 1.8 1.0 3.8 3.0 2.2 3.1 1.8 South Africa 2.5 0.6 1.2 3.4 2.1 1.3 2.3 2.3 Tunisia 5.4 4.8 6.2 4.7 4.0 4.3 4.0 5.3 Zimbabwe 2.8 3.7 0.1 -4.2 -7.5 2.3 -5.0 Asia, excluding China 4.7 -1.7 4.6 5.8 1.2 4.4 Asia 5.6 0.6 5.3 6.4 2.8 5.4 5.6 of which: China 88 7.8 7.1 8.0 7.3 9.3 7.3 6.8 Hong Kong (China) 5.0 -5.1 2.9 10.5 0.2 3.3 1.7 1.0 India 4.6 6.8 6.5 5.2 5.4 5.0 5.5 5.2 Indonesia 4.7 -13.0 0.3 4.8 3.0 3.7 3.7 3.5 Iran, Islamic Republic of 3.4 2.2 2.5 6.1 4.1 3.6 3.6 4.8 Israel 3.2 2.6 2.2 6.4 -0.5 4.6 1.1 1.7 Malaysia 7.3 -7.4 5.8 8.3 0.1 6.2 2.5 2.7 Pakistan 1.0 2.5 4.0 4.4 3.3 3.5 3.3 4.4 Philippines 5.2 -0.8 3.2 4.0 3.4 2.4 2.5 3.2 Republic of Korea 5.0 -6.7 10.7 4.8 2.7 5.2 3.5 3.2 Saudi Arabia 2.7 1.6 0.4 4.5 1.7 1.9 0.3 1.6 Singapore 8.2 0.4 5.3 9.9 -2.2 6.7 1.3 1.2 Taiwan Province of China 6.8 4.7 5.7 5.9 -2.2 5.5 1.7 0.7 Thailand -1.7 -10.2 4.2 4.4 1.5 3.9 2.0 2.0 Turkey 7.5 3.1 -5.1 7.2 -8.2 2.8 2.1 4.1 Transition economies 1.9 -0.9 2.7 6.0 4.3 -3.0 3.6 of which: Belarus 10.4 8.3 3.4 5.8 3.5 -1.9 2.0 1.5 Bulgaria <del>-</del>7.0 3.5 2.4 5.8 4.5 -2.5 3.4 3.8 Croatia 6.8 2.5 -0.42.9 3.5 -1.8 3.0 Czech Republic -1.0 -2.2 -0.2 2.9 3.5 -0.4 3.7 3.1 Hungary 4.6 4.9 4.5 5.2 3,4 0.3 3.6 3.5 Kazakhstan 1.7 -1.91.7 9.8 13.0 -5.0 6.3 7.0 Poland 6.8 4.8 4.0 4.1 1.3 3.3 1.6 2.2 Romania -6.6 -4.9 -3.2 1.6 4.5 -2.2 3.5 4.6 Russian Federation 0.9 -4.9 3.2 8.3 5.5 -5.1 3.5 3.6 Slovakia 6.2 4.1 1.9 2.2 3.0 0.3 3.4 3.1 Slovenia 4.6 3.8 5.2 4.6 3.3 1.4 3.2 3.0 Ukraine -3.0 -1.9-0.4 5.8 7.3 -8.6 4.5 5.0 Uzbekistan 2.5 4.4 4.4 4.0 4.5 -0.82.5

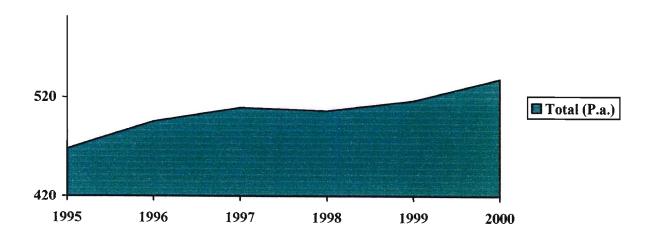
**Source:** World Bank, World Development Indicators (various issues); EIU, Country forecasts (various issues); IMF, World Economic Outlook (December 2001); and national sources.

However, negative data about the industries and businesses directly affected, declining profits of United States firms, defaults of some large companies, greater realism about the "new economy", and the restructuring of banks' balance sheets have blocked a quick return to more bullish conditions. Moreover, the US Government has boosted public expenditure in the aftermath of 11 September and accepted a huge swing from surplus to deficit in the fiscal position. However, these measures seem unlikely to provide a sufficient demand stimulus for faster world growth, even though they have helped the United States economy to bounce back sharply. (World Economic Outlook, December 2001)

#### **WORLD SEABORNE TRADE**

The world seaborne trade recorded its 15<sup>th</sup> consecutive annual increase in 2000, reaching a record high of 5.88 billion tons of goods. The annual growth rate, calculated with the data available for 2000, accelerated by 3.6 per cent and slumped considerably in 2001 to a low 2%. This decline is mainly attributable to the impact of the economic downturn observed in the US and to a lesser extent in Europe.

Figure 1. Seaborne Trade Volumes in tons ('0,000)



Source: ISL, Yearbook 2001

Various reports state that strong demand in North America, Western Europe and East Asia were the main drivers of global trade expansion in 2000 that contributed to the continued growth in world seaborne trade.

The information shows that the growth was unevenly distributed. A case in point were oil exporting countries, particularly members of OPEC that had agreed to raise production quotas during the year, had growth rates above the world average, as did parts of North America, Europe and Japan, with increases registered for both exports and imports and for the tanker and dry cargo sectors. However, Latin America, Africa and Oceania experienced growth levels that were below the world average.

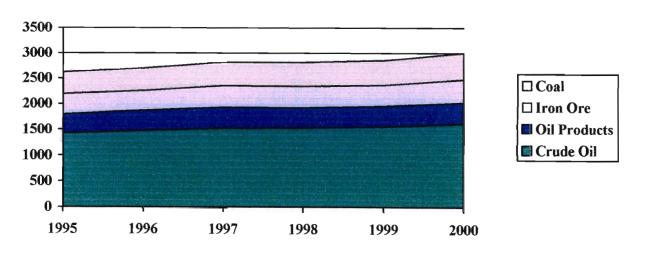
Some of the key highlights for 2001 were:

- Global cargo movements of developing countries decreased marginally, while their share of the world merchant fleet increased slightly, mainly due to increased dwt tonnage in Asia;
- The WTO estimates that merchandise trade in East Asia having had a prosperous year in 2000, countries in the region achieved double-digit growth in the volume of exports and imports. This is attributed to a strong United States demand which is the regions main market following the EU.

For global seaborne trade, the Review reports that the unusually high (7.4%) increase in trade in the five main dry bulk commodities pushed the overall level of growth of dry cargo shipments. For the three main dry bulk commodities – iron ore, coal and grain – the increases were 10.7%, 7.9% and 2.3%, respectively. Trade in containerised goods, another

Seaborne Trade volume
Major commodities ('000 Tons)

Figure 2.



Source: ISL, Shipping Statistics Yearbook, 2001 (pg 113)

component of dry cargo, rose by less than 1.0% in 2000, reflecting a consolidation of traffic volumes gained after the recovery from the Asian crisis. Oil trade in tankers, by contrast, which represented 36.5% of all trade, grew by a healthy 3.1%.

Table 2

AFRICA'S SHARE IN WORLD EXPORTS AND IMPORTS, ( as a % of volume)

1980-1999

(Per cent)

	1980	1990	1995	1999	
Exports					
Africa	4.6	2.3	1.6	1.6	
North Africa	2.2	1.1	0.7	0.7	
Sub-Saharan Africa	2.5	1.2	0.9	0.9	
Imports					
Africa	3.6	2.4	1.8	1.9	
North Africa	1.5	1.2	0.9	0.9	
Sub-Saharan Africa	2.1	1.1	0.8	1.0	

Source: UNCTAD database

The annual growth of world sea-bome trade for the year 2000 was geographically skewed. Oil exporting countries, particularly who increased production quotas during the year had a growth rate above the world average. North America, Europe and Japan also had above average growth rates — ranging between 4 and 5 per cent. Although world seaborne trade increased in Latin America, Africa and Oceania, it did so at below the world average-1.0, 0.5 and 2.3 % respectively.

#### **Bulk Cargo Shipments (Exports)**

During the 2000 period, overall dry cargo shipments grew at a rate of 3.8 per cent, reaching 3.74 billion tons for goods loaded.

Table 3 Development of international seaborne trade, selected years a (goods loaded)

Year	Tanker	cargo	\ <u>.</u>	Dry Carg	<b>JO</b>		Total (a	ll goods)
			Total	of which	main			
				bulk				
				commod	lities (b)			
	Million	%	Million	%	million	%	million	%
	tons	change	tons	change	tons	change	tons	changes
1970	1 442		1 124		448		2 566	
1980	1 871		1 833		796		3 704	
1990	1 755		2 253		968		4 008	
1998	2 082		3 549		1 170		5 631	
1999	2 085	0.1	3 598	1.4	1 196	2.2	5 683	0.9
2000	2 149	3.1	3 736	3.8	1 285	7.4	5 885	3.6

Source: Estimated by UNCTAD secretariat on the basis of annex II and data supplied by specialised sources.

- Including international cargoes loaded at ports of the Great Lakes and St. Lawrence а system for unloading at ports of the same system.
- (P) Iron ore, grain, coal, bauxite/alumina and phosphate.

#### **SSA and International Trade**

As in most other parts of the developing world, the emphasis on trade liberalisation and exports in the past decade has meant an increased importance of international trade in economic activity in SSA. As a consequence, trade (merchandise exports plus imports) in SSA as a share of GDP increased from 38 to 43 per cent between 1988-2000.( UNCTAD Report 2001)

However, despite the increased trade orientation of SSA, the share of the region in world trade has declined because its exports have grown much more slowly than world exports, a phenomenon often seen as the marginalisation of the region in world trade

Table 4

COMPOSITION OF EXPORTS FROM SUB-SAHARAN AFRICA,

1980,1990,1997

(as Per cent share of total regional export volume)

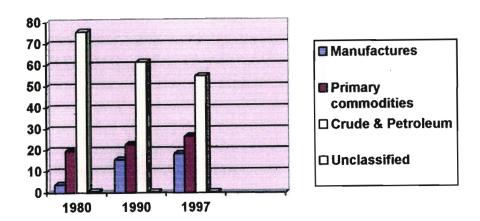
	1980	1990	1997
Crude & petroleum	75.6	61.3	54.7
Non-oil primary	19.7	22.8	26.6
commodities			
Manufactures	4.0	15.5	18.4
Unclassified	0.7	0.4	0.3
			,

Source: UNCTAD database

Figure 3

COMPOSITION OF EXPORTS FROM SUB-SAHARAN AFRICA,
1980,1990,1997

(as a % of total volume)



SOURCE: UNCTAD

The composition of African exports has continued to be dominated by primary commodities, despite some progress in moving to manufactured goods according to UNCTAD. The increase in the share of manufactures in African exports partly reflects the effect of declines in the prices of commodities relative to manufactures in the past two decades.

#### **SOUTH AFRICA - ECONOMIC OVERVIEW**

RSA has a GDP of some US\$ 126 billion (2000) with significant growth potential. The country enjoys easy access to other markets in Africa, has sophisticated financial institutions and capital markets, a good communication infrastructure, lower labour costs than western industrialised countries and inexpensive electrical power and raw materials.

Since 1994 when the first democratically elected government came into power, the country became politically stable with a more open and outwardly oriented economy. South Africa has, however, yet to develop to its full potential because of years of isolation, former inward-looking trade and investment policies and low savings and investment rates.

It continues to lack skilled labour and around one quarter of the labour force is unemployed. The skills' shortage results from the inherited shortcomings of the old "apartheid" educational system as well as the escalating departure of skilled labour from South Africa to more lucrative employment opportunities abroad.

The South African government is steadily addressing the many serious challenges it is faced with, some with more success than others however. These include: the still huge income inequality between the different race groups; crime; job losses; poor quality schools, need for skills training as well as social services for all; HIV/AIDS; poverty; corruption and disappointing economic growth rates especially during the preceding two years.

#### **REGIONAL ROLE**

South Africa's geographic position offers access to markets, not only throughout Africa, but also further afield in the Southern Hemisphere. As a member state of the SADC, it plays an important role in developing regional trade and co-operation and benefits from the SADC Free Trade Agreement that came into operation in September 2000.

South Africa has by far the largest economy in the region. However, South Africa's reputation as an emerging market also suffers from its proximity to the instability and conflicts that have appeared its certain northern neighbours and in and around the central African sub-region.

Regional stability and investment growth is government's top priorities. Together with Algeria and Nigeria, South Africa is involved in an initiative termed NEPAD, which is a comprehensive plan for Africa's development. Central to NEPAD is the creation of climate for sustainable development, enhances economic governance, human resource development, infrastructure provision, diversification of goods and services production, open international trade markets, increase capital flows and realign institutional arrangements.

#### Mining and Minerals

Historically, minerals have played a major role in the creation of wealth and the industrialisation and economic development of the country. The mines generated employment for vast numbers of the population, earned export revenues, and attracted foreign investment, skills and technology. The mining industry was and remains market-oriented and is a major contributor to the economy. Mining's direct contribution appears to have declined as the SA economy has grown and diversified.

However, much of the growth in manufacturing and chemicals has been mineral-based as local processing increased. Prior to 1991, gold dominated the industry's total sales and export earnings. Since then, the contributions from other mining, the ferrous and steel industry and (in 2000) the PGM(s) have exceeded gold's contribution with coal and coal-petrochemicals and plastics rapidly reducing the gap.

Mining directly contributes some 9 percent to the GDFI and this will increase significantly if all the identified projects are implemented - R70 billion over the next five years, excluding energy and oil and gas projects plus R20-30 billion for pipelines. In 2000, 78 percent of primary mineral sales revenues came from exports, which accounted for 47 percent of total exports. This increases to 59 percent when taking account of both primary and beneficiated mineral exports, but not including manufactured products such as catalytic converters (15 percent of world supply), automobiles and stainless steel bulk containers of which SA is the world's largest producer. (**Department of Trade and Industry, Outlook on RSA**)

Direct employment in the mining industry has declined considerably over the past decade. This, together with an increase in the proportion of skilled workers and mechanisation has improved productivity, significantly increased real average wages per worker, and reduced costs and consequently the ability to mine lower grade ores.

The country has world-class and competitive industries; infrastructure, technologies and skills have been developed and built on the availability and development needs of these huge resources. These include:

- transportation,
- water infrastructure;
- coal-based electrical network that accounts for more than half the continent's power;
- synthetic fuels and petrochemical products also produced from coal;
- ferroalloys of manganese, chrome, vanadium and silicon; carbon-, alloy-, ultra-thin and stainless steels; fertilizers; titanium powders and pigments;
- refined precious and base metals of gold, PGMs, copper, zinc, nickel and others;
- aluminium smelters using imported alumina; and others.

The exploitation of natural resources over the past century has created a transportation infrastructure in South Africa that dominates the subcontinent. South Africa provides more tonnage through its ports than the combined facilities of Angola, Gabon, Kenya, Mozambique, Tanzania, and the Democratic Republic of Congo, and more air transport than all other countries of Southern, Central and East Africa combined.

South Africa's international trade infrastructure is relatively well developed, while in the context of the developing world it ranks as excellent. However, reduced infrastructure spending over the last several years due to budgetary constraints has particularly stressed South Africa's existing road network. Trade support services such as cargo inspection, standards information and certification, and credit insurance have been improved, and the country's major ports (Durban, Cape Town, Richards Bay, and Port Elizabeth) are well-equipped to move cargo of all types.

South Africa is strategically located in terms of geography and serves as the gateway into SADC. The amount of trade through South Africa's commercial ports is poised to grow and that requires a fluid and efficient maritime industry if it is to be sustainable.

A fluid trade environment is dependent on sound infrastructure, systems, technology and a good logistics capability. Therefore, the importance of the maritime industry in South Africa cannot be over-emphasised.

In an effort to evaluate opportunities inherent in this sizeable trade environment in South Africa, this paper will focus of the Logistics of bulk exports and assess what role can be played by the government by way of incentives and financial support to educational institutions that can develop products to advance the skill set required in order to create sustainable growth and employment opportunities in the logistics of bulk commodities, particularly exports.

#### THE SIGNIFICANCE OF THE DRY BULK SECTOR

The data in **TABLE5** (in the next page) shows that Dry bulk cargoes constitute a significant portion of seaborne trade, estimated at 60%, of total goods loaded in 2001. RSA has over 110 million tons (excluding petroleum products) handled through its ports during 2001.

## TABLE 5(i)

### CARGO HANDLED (SA PORTS)

#### AN-DEC 01

	RICHARDS BAY	DURBAN	EAST LONDON	PORT ELIZABETH	MOSSEL BAY	CAPE TOWN	SALDANHA	TOTAL
ARGO HANDLED						-		
MPORTS	1		446,438					
COASTWISE	11,118	7,330,937	27,402	1,324,997	-	1,883,506	-	10,996,995
JOASIWISE	<u>-</u>	125,637	27,402	17,708	_	266,257	_	437,005
TOTAL CONTAINERISED	11,118	7,456,574	473,840			,		
ANDED	11,116	7,430,374		1,342,703		2,149,763	_	11,434,000
SHIPPED						ļ		
EXPORTS	[		492,466					
COASTWISE	63,616	6,271,164	1,204	906,590	-	1,889,576	-	9,623,412
TOTAL	-	312,824	493,671	6,628	-	154,067	-	474,724
CONTAINERISED SHIPPED	63,616	6,583,988	,	913,218	-	2,043,643	-	10,098,135
TRANSHIPMENT CARGO	_	2,355,332	19,010	76,989	_	508,300	_	2,959,631
		_,,						2,505,002
TOTAL CONTAINERISED LANDLED	74,734	16,395,894	986,521	2,332,912	_	4,701,705	-	24,491,766
BULK CARGO								
LANDED								
<b>IMPORTS</b>			1,500					
COASTWISE	4,666,073	2,306,885		-	-	61,856	-	7,036,314
TOTAL BULK	-	-	1,500	-	-	11,422	-	11,422
LANDED	4,666,073	2,306,885	2,500	-	-	73,278	-	7,047,736
SHIPPED								
EXPORTS	81,160,938	5,204,335	79,070	1,381,519	_	3,121	24,046,844	111,875,827
COASTWISE	_		-				,- : -,- : -,	,_,_,
TOTAL BULK	04.457.000		79,070		-	1,303	-	1,303
SHIPPED	81,160,938	5,204,335		1,381,519	-	4,424	24,046,844	111,877,129
TRANSHIPMENT CARGO	-	-	-	_		<u>-</u>	_	-
TOTAL DRY BULK	85,827,011	7,511,219	80,570	1,381,519		77,702	24,046,844	118,924,865

Source: NPA

BREAKBULK CARGO HANDLED			TABLE 5(ii)					
LANDED IMPORTS	131,776	2,748,579	193,520	160,556	_	960,988	643,868	4,839,287
TWISE	131,770		-			,	043,000	Ì
TOTAL	-	941	193,520	2,014	743	1,883	-	5,580
BREAKBULK LANDED	131,776	2,749,520	130,020	162,569	743	962,871	643,868	4,844,867
SHIPPED								
EXPORTS	4 912 642	E 00E 244	144,585	340 604		2 225 222	4 505 450	4444
COASTWISE	4,813,642	5,085,311	-	340,681	-	2,036,038	1,686,450	14,106,707
-	-	13,761		11,507	28,955	1,398	-	55,621
TOTAL BREAKBULK SHIPPED	4,813,642	5,099,072	144,585	352,187	28,955	2,037,436	1,686,450	14,162,328
TDANCUIDATAIT		i			! }			
TRANSHIPMENT CARGO	_	32,315		-	-	37,134	-	69,449
TOTAL BREAKBULK HANDLED	4,945,418	7,880,907	338,105	514,757	29,698	3,037,441	2,330,318	19,076,644
TOTAL CARGO HANDLED						_		
LANDED								.
IMPORTS	4 800 067	12 225 424	641,458					[
COASTWISE	4,808,967	12,386,401	27,402	1,485,553	_	2,90 <del>6</del> ,350	643,868	22,872,596
TOTAL CARGO	-	126,578	660.060	19,722	743	279,562	-	454,007
LANDED	4,808,967	12,512,979	668,860	1,505,275	743	3,185,911	643,868	23,326,603
SHIPPED								
EXPORTS			716,121					
COASTWISE	86,038,196	16,560,809		2,628,789	-	3,928,735	25,733,294	135,605,945
COASTWISE	_	326,585	1,204	18,135	28,955	156,768		E21 647
TOTAL CARGO			717,326		20,300	130,700		531,647
SHIPPED	86,038,196	16,887,394		2,646,924	28,955	4,085,503	25,733,294	136,137,592
TRANSHIPMENT CARGO	-	2,387,647	19,010	76,989	_	545,434	_	3,029,080
TOTAL CARGO								
HANDLED	90,847,163	31,788,020	1,405,196	4,229,187	29,698	7,816,848	26,377,162	162,493,275

Source: NPA (figures exclude petroleum products)

Jones & Kennedy report, August 1991, showed various aspects on impact of the terms of shipment of the South African seaborne exports in terms of the economy and the local shipping industry. This report details the issues in the shipment of bulk cargo that, if managed differently, could advance South Africa's position in the management of shipping and logistics of the country's vast bulk cargoes.

It is proper that the subject of bulk exports be evaluated in the context of the key components of the logistics value-chain. These components include;

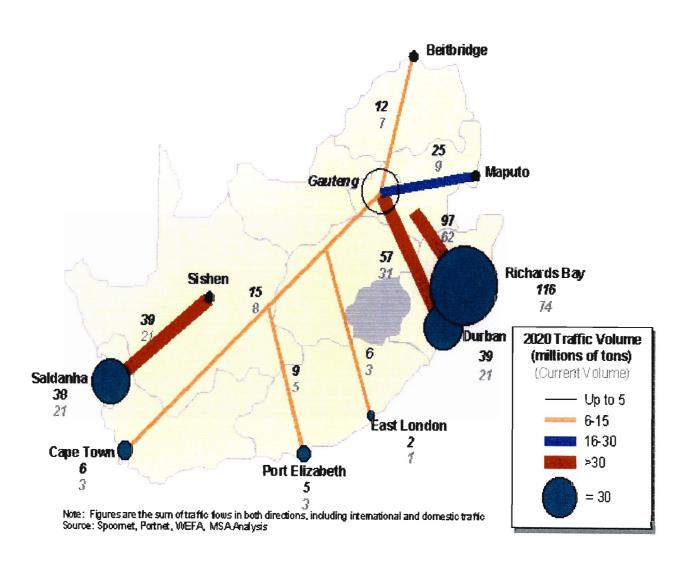
- Transport infrastructure ( land bridge)
- Maritime sector, (Ports and supporting services)
- Trading Environment

#### **Freight Transport**

The transportation infrastructure in South Africa is general in good shape, particularly for purposes of bulk cargo and less so for the general cargo . In some cases it compares well with that of developed countries. Over the years South Africa has developed a comprehensive freight transportation network. The National Department of Transport (NDOT) is committed to developing the transport system that will address the needs of freight customers for sustainable, highly reliable and rapid transport services via networks of road, rail, sea, air and interchange infrastructure.

Figure 4

SOUTH AFRICAN TRANSPORT NETWORK



#### THE MARITIME INDUSTRY IN SOUTH AFRICA

The maritime industry is wide and often difficult to describe in a definitive manner. This is due to the fact that there are numerous industries that derive their economic activity (directly) from the existence of seaborne trade and there are others that support the former, and derive indirect economic activity, hence forming part of the bigger definition.

The dissection of the value-chain shows a myriad of activities that share the relationship with the sea, namely;

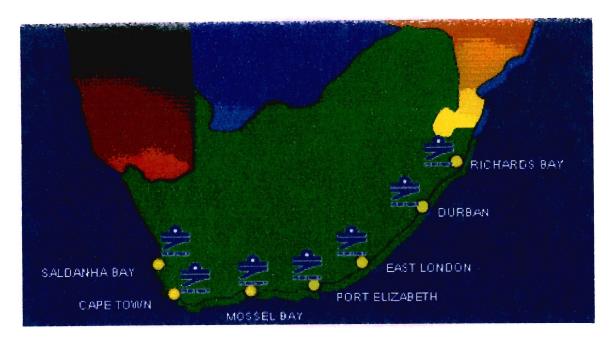
- Enterprises that are focused on marine resources
- Enterprises that are focused on marine transportation of cargo and services ancillary to such support
- The ports industry
- Marine tourism industry
- Naval defense and government department concerned with international and maritime relations
- Institutions concerned with maritime education, training and resources.
   However, this paper seeks to focus on two primary sectors in the maritime industry;
  - CARGO HANDLING SECTOR: Ports, Rail, Road,
     Stevedores and Shipping Services.
  - SUPPORT SERVICES SECTOR: Financial, Legal, Media & Telecommunication services.

This breakdown is by no means exhaustive but merely looks at key components of `this vast industry.

#### Figure ii

#### **CARGO HANDLING**

#### PORTS OF SOUTH AFRICA



**Source: SAPO** 

South Africa has seven commercial ports (<u>as shown above</u>) that are owned and operated by NPA and SAPO, both Divisions of Transnet and owned by the government.

NPA is a national authority whose primary function is to regulate port activity, develop and maintain port infrastructure. NPA operates under an independent management team and is subject to the National Ports Authority Act, which is being developed and is expected to take effect in late 2002.

SAPO, on the other hand, is a port operations organisation that has been established for purposes of operating all the port terminals owned by Transnet until such time that they are concessioned to private terminal operators. Whilst the ports in South Africa fall under the control of the state, numerous terminals are operated by the private sector on a long-term lease basis with the Port of Durban, in Particular, having the most number of private operators, in the Maydon Wharf as well as the Island View areas.

During the 2001 fiscal period, The commercial ports handled some 160 million tons of cargo (excluding petroleum). Dry bulk cargo represents the majority of the export cargoes.

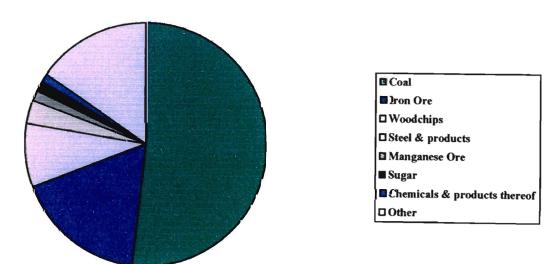
TABLE 6
THE MAIN BULK CARGOES HANDLED IN SOUTH AFRICAN PORTS (2000-2001)
(TONNAGE)

#### **EXPORTS**

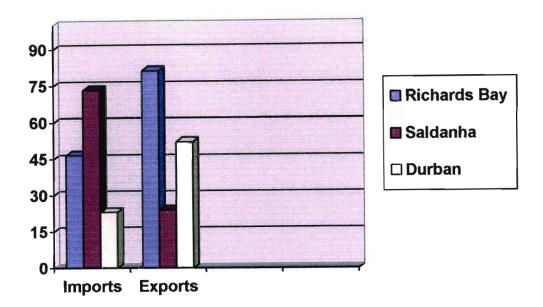
Commodity	Tonnage	
Coal	67,906,294	
Iron Ore	22,746,636	
Woodchips	10,874,019	
Steel & Products thereof	4,284,899	
Ferro Alloys	2,844,797	
Manganese Ore	1,745,785	
Sugar	1,635,207	
Chemicals & Products thereof	1,620,374	
Other	20,426,585	
	134,084,597	

#### Graph v

## Select BULK CARGO HANDLED ((Million tons)



#### **BULK CARGO IN SELECTED PORTS (Million Tons)**



Source: NPA, March 2002

#### **Private Terminal Operators**

Privately owned and operated terminals handle some 52% of the non-oil cargo moving through South African ports. This cargo comprises mainly of bulk and/or breakbulk cargoes. The State-owned Ports Company still enjoys near-exclusive handling of containerised cargoes.

Some of the most significant terminals that are operated by the private sector are;

- Richards Bay Coal Terminal (RBCT), This terminal was commissioned in 1976 and is owned by the coal mining companies. This facility is projected to handled well in access of 85 million tons of coal in 2005.
- Bluff Mechanical Appliance(BMA), This terminal is a four nerth facility situated in the port of Durban It is operated on a long-term lease by Rennies and handles sized coal.
- Rennies Dry Bulk Terminals, RDBT comprises of various dry bulk terminals operated by the Rennies group including grain terminals.
- Island View Storage(IVS) and Vopak Terminals are specialist petrochemical terminal operators which operate over 450 tanks at various sites in the Ports of Richards Bay, Durban and Cape Town.
- Fresh Produce Terminal, FPT operates fruit export terminals for Capespan.
- □ **SA Sugar Terminal;** This terminal is owned and operated by the Sugar industry. It receives, stores and load raw sugar and has a storage capacity of 535,000 tonnes.

#### Stevedoring

Cargo-handling services aboard ships is carried on by the stevedoring industry which is separate from the activities of SAPO. From 2003 this is expected to change as SAPO seeks to gain operational control on the planning and management of stevedoring in the container terminals. This service usually includes tallying, lashing and load sequencing of cargo aboard vessels.

Port privatization is most likely the impact the stevedoring industry as private terminal operators may wish to perform their own stevedoring.

#### **SHIPPING SERVICES**

#### Clearing & forwarding

Many cargo owners rely on clearing and forwarding agents for the management of cargo documentation, liaison with customs, carriers and port authorities, and the payment of charges involved in the clearing and onward movement of cargo. Some of the larger agents operate general and bonded warehouses and have relationships with road transportation companies.

#### **HINTERLAND TRANSPORT**

The commercial ports of South Africa each serve their hinterland through a network of rail and road transport services.

#### Rail transport

Spoornet, a division of Transnet Limited, is the owner and operator of rail operations serving both freight markets in Southern Africa. Spoornet is the largest haulier of general freight in the Southern African region with an annual turnover in excess of R8 billion.

The freight business includes the two focused services markets;

- coal
- Iron ore.

Whilst over 60% of bulk cargo in South Africa (export and import) are carried by rail, the performance of rail transport between 1970 and 2000 mirrors the overall behaviour of the transport sector over the same period. During this period has been witness to changes in expansion (with rapid growth during the 1970s) and virtual stagnation in the 1980s.

Following the poor pace of development in the rail sector from the 1980's, the profile and quantity of cargo carried by rail has shrunk to areas of low-density demand and is skewed

towards low-valued bulk staples. Tonnage analysis of rail transport's performance since 1970 does not conjure up an image of a transport mode in either crisis or irreversible decline.

The basic rail infrastructure of the South African economy, massive by African standards, has changed relatively little over the last three decades of the 20<sup>th</sup> century. Total route kilometres of track under the control of Spoornet (and its predecessor, South African Railways), the rail division of Transnet, rose from some 19,800 kilometres in the early-1970s to 21,217 kilometres by 1987, largely as a result of the completion of lines to the bulk export ports of Richards Bay and Saldanha (SAR&H Annual Report, 1973-74; S A Transport Services Annual Report, 1986-87). Thereafter, the public rail infrastructure has shrunk somewhat to approximately 20,400 kilometres by the end of the 1990s, as certain low-density branch lines have been closed.

Since the 1970s, freight activity increased from 111 million tons in 1970 to a peak of 188 million tons by 1981, or by some 62 per cent. The following years saw swings in growth trends with volumes fluctuating between a low of 159 million tons in 1983 and highs of 186 million tons in 1989 and 1998.

Thereafter, real activity continued to grow but at a decreasing rate to reach some 99,000 million ton-kilometres by 1999 (SAR&H Annual Reports 1969/70 &1978/79 and Spoornet 1999). This indicates that rail volumes have stabilised after the early-1980s, but that average lengths of haul have risen somewhat, from approximately 475 kilometres in 1980 to some 550 kilometres by 1999.

If South Africa's public rail network, rolling stock and output levels are compared with those of other significant economies in Africa or elsewhere in the southern hemisphere, as shown in Table 6, South Africa shows up strongly. This country's basic rail backbone, measured in route-kilometres, stands well below that of Argentina's rail network and somewhat below that of Brazil, but exceeds those of other South American, African and Australasian economies.

Table 6 Rail transport size and scale indicators, selected African and southern hemisphere countries, mid-1990s<sup>1</sup>

Country	Network	Staff	Loco-	Freight	Freight	Freight ton-
	route-kms		motives	Wagons	Tons x	kms x 10 <sup>6</sup>
					10 <sup>6</sup>	
Argentina	34059 <sup>2</sup>	67000	992	32823	No data	7860
Brazil	26648	61645	1805	52039	105.03	45664
Chile	2472	2237	132	347	4.53	967
South	20441 <sup>3</sup>	47140	3547	133645	180.13	95591
Africa						
Nigeria	3054	11346	200	no data	0.16	no data
Egypt	4810	91065	835	3102	52.41	no data
Algeria	4290	15847	231	572	1.80	no data
Australia <sup>4</sup>	16492	28765	2007	12807	76.10	40000

Source: Rail Business Report, 1998; RailRoad Association, 2000.

**Notes:** 1. Years of enumeration vary across countries, but are generally drawn from the 1990-95 period. The South African staff level is based on 1998 data.

- 2. Over 10000 kilometres of the Argentinian rail infrastructure comprise narrow-gauge lines.
- 3. Excluding private lines operated by various mines and industries; 1998 data.
- 4. The Australian information represents an amalgam of the activities of the Australian National Railways (ANR) and State operations in South Australia and New South Wales. Ton-kilometre calculations were furnished only by the ANR, but have been aggregated heroically for the whole country.

The above data projects positive position for the RSA relative to that of many other comparable nations, and offers its services to users at costs in line with or below those associated with many economies.

The data shows that central to growth in rail traffic in the RSA has been the activities of the transportation of iron ore from the Sishen area in the Northern Province to Saldanha on the Orex line, and more powerfully by the carriage of coal from mining areas in Mpumulanga to Richards Bay.

In terms of legislation, public rail has historically been recognised as the national domestic carrier, and as such has been required to act as a common carrier and to operate several uneconomic freight (and, particularly in the past, passenger) services. Moreover, the same legislation required the national transport services to operate in terms of business principles, and to balance their books. The latter was always interpreted very broadly, and was applied to the public transport sector, not to individual modes, and certainly not to discrete services within modes. The result was a complex web of cross-subsidisation, with generally profitable ports and pipelines bailing out loss-making rail activities.

Within rail, the tariff philosophy adopted was that followed by most common carriers (in all transport modes) who face a diverse traffic base covering a broad spectrum of commodity types and values. That standard practice is to raise rates on higher-value cargo, in respect of which demand is relatively price inelastic, in the process charging "what the market will bear", while low-value cargo, for which demand is conventionally believed to be more price elastic, attracts lower rates. This type of "Ramsay" pricing was indeed the norm in South African rail for much of the 20<sup>th</sup> century, but after the mid-1970s, it has become increasingly difficult to pursue, for four principal reasons. The first was the increase in low-rated bulk traffic associated with the new bulk-export ports. The second was the "container revolution", that transformed heterogeneous general cargo into standard freight containers, for which unitary tariff rates became the only sensible pricing mechanism. The third emanated from the recommendations of a series of public Commissions of Inquiry and

multi-disciplinary studies that were tasked to investigate domestic transport policy<sup>1</sup>. Common to all of these was the advocacy of a more competitive domestic transport market, characterised by freer competition between road and rail, with both modes charging the "right" (cost-related) prices for their services, but with rail relieved of the financial burden of providing uneconomic services, most notably the transport of commuters from distant black dormitory suburbs to industrial areas. The fourth and most powerful reason has been the emergence of a road freight transport industry based on prices that are emphatically "wrong", insofar as heavy freight vehicles systematically underpay for the use of the road infrastructure. The result of these influences is a set of rail prices that more closely approximates underlying cost, albeit based on capital cost levels that are below long-term capital replacement needs, but which nonetheless fails to undercut road rates (Department of Transport, 1998: 51), and which therefore also fails to stem a migration of general cargoes from rail to road.

In sum, the combination of indifferent service quality and an inability to set prices at levels that are both competitive and sufficient to cover long-term capital replacement needs, bodes ill for the sustainability of the general freight services of rail in South Africa. The oft-expressed view of public spokespersons (from the Minister of Transport downwards) and transport economists is that rail should be fulfilling a larger role in the long-distance carriage of commodities other than bulk mineral exports. Without a fundamental revision of modal costs and general quality of service delivery, it is hard to see how these fine sentiments can be transformed into changed behaviour on the part of transport users and rail transport providers. (Jones, T 2002)

#### Road transport

Road transport is focused on containerised cargo moving through the ports of South Africa. Road haulage of breakbulk or conventional cargo estimated at about 25%. Uncontainerised cargo moving by road comprises mainly timber, paper, steel products, palletised goods and cargoes, which are difficult to handle because of their mass. Relative to rail, a very small percentage of bulk cargo is road haul over long distances.

#### SUPPORT SERVICES

In an effort to narrow the wide range of possible support services, this document will focus on some of the key services that form part of the value-chain in the maritime industry in South Africa.

#### **LEGAL SERVICES**

The South African Maritime Law Association (MLA), a professional association of maritime lawyers, has a large database of maritime lawyers. Its most notable projects have been the preparation and bringing onto the statute book of the Admiralty Jurisdiction Regulation Act, the Carriage of Goods by Sea Act, and the Wreck and Salvage Act.

#### **INSURANCE**

Insurance on sea-freight paid by importers and exporters basically comprises credit guarantees, foreign exchange cover, marine insurance for cargo and error/omissions cover. These include Hull & Machinery insurance (H&M) as well as Protection & Indemnity insurance (P&I). H & M insurance provides cover for mainly tangible assets such as the vessel's hull, equipment and machinery in which the insurer has a direct insurable interest.

There are several P&I Clubs in the International Group of P&I Clubs, which together provides indemnification to the owners of more that 90% of the world's ocean-going tonnage in respect of third party risks, including environmental liability.

#### **TRADE & LOGISTICS**

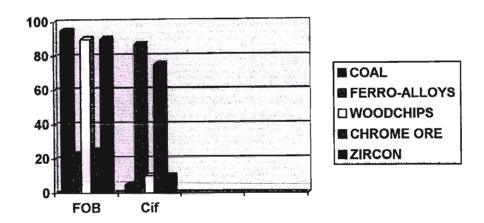
The world economy is getting increasingly integrated in terms of customers and sourcing for goods and services. The technology advancements are changing the way business is conducted. This change has enabled companies and countries to focus on high growth sectors and optimally locate their resource where it makes the most sense and offer them competitive advantages.

Over the years, due to a number of reasons including sanctions against South Africa, bulk exports have been largely traded on an FOB basis. This means that the logistics activities of such exports are left to the importers in Europe and Far East.

#### Table vi

#### **BULK EXPORTS\***

FoB vs. Cif terms of shipment (in % age)



\*select major commodities

Source: IVS 2002

(Jones & Kennedy, 1991) reported that various shippers and mining houses give a range of explanation for choosing to mostly ship FOB over Cif

Some of the most prominent reasons that were established during a research exercise were as follows:

- 1. a perception that the foreign buyers of RSA products wield greater clout than sellers, consequently can secure better freight rates.
- 2. Restrictive maritime practices on the part of foreign buying nations, typically Japan.
- 3. The threat of political actions against vessels carrying South African cargoes (during the Trade embargo against RSA)
- 4. A lack of shipping expertise on the part of several exporters and sheer indifference to shipping.

Excerpt: "THE TERMS OF SHIPMENT OF SOUTH AFRICA SEABORNE EXPORTS", 1991, pg. 7

It should be noted that majority of these explanations seem to still hold true with the exception of item 3, above. However, with the re-entry of South Africa into the global trading community given some of the advantages inherent (which will be explored later) in RSA, more shippers are looking at reviewing the status quo.

#### Economic impact of advancing local control of bulk export arrangements

In pursuit of a better trading environment, it is important that it be asked if shipping more bulk cargoes on a Cif basis will deliver any significant advantages to South Africa and the exporting community.

There are several positive externalities that could be derived from a Cif oriented export culture in RSA. Jones & Kennedy, 1991 reports some of the benefits as follows:

- Economic diversification which would result from an increase in economic activities involving South African factors of production,
- Improvements in the bop,
- Creation of logistics and related support services and employment.

#### The consequence of CIF-oriented exports

Regardless of nationality of the carriers, Fob shipment terms mean that foreign buyers take control of the shipping arrangements. This situation tends to result in the buyer(s) overlooking South African ship-owners and/or related service providers in favour of their foreign-based counterparts. This means that as economically important shipping and logistics arrangements are performed by foreign-based organisation(s), RSA loses opportunity in respect of;

Employment opportunities in the shipping support services such as ship broking.

However, where the terms of shipment are Cif, the exporter retains the logistics rights and thus can appoint (RSA-based) the providers of various "strategic" transportation

arrangements giving the opposite effect to Fob oriented shipping. The primary (direct) beneficiaries of this process are local ship-owners, vessel charters and or ship brokers.

## THE BALANCE OF PAYMENTS EFFECT.

For decades, RSA has been a net debtor nation on the services or 'invisible' account of the balance of payments. Close examination of the accounts shows that one main contributors to this service deficit is the item of freight and merchandise insurance.

Jones & Kennedy,(1991, pg. 18-19), shows that the country's payments to foreign factors of production, for several years, has been a far cry when compared to receipts entries.

TABLE 7

Balance of Payments on the current account

	Seasonally adjusted and annualised (R billions)					
	1999	2000	2001	20	02	
Freight and				q1	q2	
Insurance	10,329	12,810	15,516	5,013	5,247	
<b>Payments</b>						
Freight and						
Insurance	1,395	1,965	2,157	240	183,3	
Receipts						
Net Debit	8,935	10,809	13,358	4,773	5,063	
				-	-	

Source: S.A Reserve Bank, Quarterly Bulletin, March 2002

It should be noted that this does not reflect a complete picture of the freight-related account. Certain components of the freight bill are omitted and these include:

- Payment of freight by South African shippers to South African carriers (since these
  transactions do not involve foreigners, they do not enter into any formal statement of
  the RSA balance sheet with the rest of the world.
- The freight payments made by foreign-based buyers to foreign carriers. Since these transactions do not involve South African factors of production, they remain outside the RSA balance of payments accounts.

Given that a majority of bulk cargo is bought and shipped by foreign-based organisations, it is reasonable to assume that a substantial quantum of figures escapes entry into the Bop account.

Table 7.

Commodity	Export volume/p.a.	(FoB) Terms of Shipment (approximate)	Freight Rate/Ton*	Freight Payments**
Coal	67,906,294	85%	\$ 6,25	\$360,752,187
Iro ore	22,746,636	95%	\$ 6,70	\$144,782,338

<sup>\*</sup>estimates as per market fixtures in TradeWinds, 15 March 2002, rates/ton fio and are based on Richards Bay-Rotterdam (Coal)& Saldahna Bay-Zhanjiang

The above table shows that BoP accounts of RSA suffers a leakage of some \$ 505,534,525. It should be noted that these figures are merely serving as an indicator and are based on the two commodities tabled above. Therefore it is plausible to assume that a full exercise on all the major bulk commodities would yield an even larger number. Clearly this position does not auger well for RSA economy.

<sup>\*\*</sup>amounts escaping the Bop account in RSA.

## SHIPMENT OF A BULK CARGO PARCEL

A typical shipment of a coal parcel (60,000 MT coal export parcel to Rotterdam, ex- Richards Bay) would result in the following "strategic" activity:

•	Ship Broking	~ \$ 18,000
•	Freight finance & Payment	~ \$ 900,000
•	Communication	~ \$ 2,000
•	Charter party agreements	~ \$ 1,500
•	Bunkering	~ \$ 5,500
•	Manning & supplies	~ \$ 6,500

**Total** 

~ \$ 933,500 = R9, 335,000

#### **Assumptions:**

- 1. R/\$ = 10
- 2. Broking is equal to 2% of freight cost.
- 3. Cost of Freight/MT is \$15,
- 4. Bunker delivery fee is \$ 3,67/ MT.
- Manning & Supplies commission is 5% of wage bill.
- 6. No freight insurance has been taken into account.

#### **CAPACITY CREATION**

#### - INSTITUTION BUILDING AND HUMAN RESOURCE DEVELOPMENT

Success in today's markets is increasingly dependent on effective arrangements for production, marketing, and distributing or logistics of goods (commodities) at the least possible cost.

In the case of South Africa, where self-sufficiency and isolation were a norm, a concerted effort is needed by all involved parties-public and private-to overcome logistical constraints and the focus on new possibilities that would create new growth points.

Enhancing the competitiveness of domestic producers and traders in export markets requires the establishment of mechanisms which are essential for creating a market environment in which producers, traders, and buyers can interact effectively.

One of the important considerations is to ensure that evolving requirement, i.e. efficiency and low cost, in the international markets are addressed efficiently through appropriate adjustments in the production and logistics arrangements of exports. Secondly, it is important to build capacity of the national service industries to meet the changing demand for required logistical support of the new developments.

#### - TISA

The strategic nature of these developments requires that public and private sector organisations join hands in driving such an initiative. TISA has identified the need to create an enabling environment in which such processes and adjustments could materialise.

Various regulatory reforms, adequately developed and managed infrastructure, and the access to modern technology and a depreciating currency are key elements in such a framework. To commence with this development, it is essential that capacity for well-trained personnel to engage in all functions associated with bulk export logistics services be created.

The concept of integrated logistics management is largely unknown in the South African industrial and trading circles and the applications thereof are limited. It would appear that, following years of isolation, a serious lake of awareness and in some instances a lack of desire in changing the status quo, exists amongst the producers, i.e. Mining houses and traders (foreign-based) of the potential for huge cost savings (thus improved margins) and the potential to create a growing centre for logistics in South Africa.

In addressing this environment, TISA should drive a process to deliver institution building and human resource development to enhance the logistics management capabilities in the national economy. This process should included extensive networking between public officials, trade and industry organisations, the management of selected key enterprises, service agencies (e.g. banking, insurance, warehousing, and transport), and institution of higher learning.

## **RSA: COMPARATIVE ADVANTAGES**

South Africa has several comparative advantages when it come to trading with the EU. These advantages are;

- RSA has an abundance bulk commodities that it exports to Europe and the Far East.
- The country has a huge supply of youthful labour.
- RSA is largely an English speaking country.
- Situated on the GMT (+1) hour time zone, which means an hour or two in time differences with Europe.
- Local currency depreciated to 1/10<sup>th</sup> (on average) of the major currencies, i.e. the Euro and the US Dollar.

#### A CASE FOR RELOCATION OF LOGISTICS CONTROL

The new government in South Africa has introduced several changes in the corporate regulations including allowing major mining companies a dual listing status under the auspices of gaining access to greater capital markets. One of the net effects of the change in the domicile of these organisations has been the shift in the logistics decision process from South Africa to Europe in the main. Whilst it can be argued that, foreign-based traders control a lot of the trade out of South Africa, the mining houses have considerable leverage that has now been lost to their newly found areas of residence.

This matter, whilst undesirable for locally based shipping companies, particularly those that are emerging, means that the relocated mining companies have to deal with considerably higher cost of operations given the exchange rate differential between RSA and their new locations.

Therefore, in a world of fierce competition where, ceteris paribus, least cost operations are desired, South Africa is increasingly becoming advantageous in terms of operating cost per capita.

## **Favourable Exchange Rate**

In the last five years, the local currency has declined consistently against the major currency in the world, namely the US Dollar, and more recently the Euro. Whilst this decline has negative economic impact on the local economy in terms of "imported" inflation, it has rendered the cost of local factors of production cheaper than their equivalents in Europe and the USA.

For instance, two traders of equal experience, one in South Africa and Europe, would have earned;

COUNTRY	1995	2000
South Africa	R15, 000 p.m.	R21, 000 p.m.
Europe	\$ 3,500 p.m.(R 12,250)*	\$ 5,000 p.m. ( R 42,000)**

Source: Clarkson plc.

(average exchange rates)

It should be stated that, over this period;

- on average, the prices of commodities have not increased in dollar terms.
- no consideration has been given to the cost of living or similar factors in each country but rather a direct rand-for-rand comparison has been computed.

This implies that, over a five year period, 1995-2000, the cost of employing a trader, in rand terms, has escalated 3,43 times in Europe whilst the revenue (price) of commodities have declined considerably over the same period.

<sup>\*</sup> Rand/Dollar = R3, 50/\$

<sup>\*\*</sup> Rand/Dollar = R 8,40/\$

#### THE APPROACH

As an integral part of the development of an efficient logistics centre of excellence, institutional capacity should be created for purposes of building human resource expertise in this filed. In the last few years various institutions of high learning have been established with a maritime focus.

These institutions include;

- University of Natal
- Natal Technikon
- University of Cape Town
- University of Stellenbosch
- Rand Afrikaans University.
- Teta

This list is not exhaustive but mere highlights some of the most prominent of these institutions.

This initiative needs to be driven by TISA. In this regard, TISA's mandate should be to support the development of the South African logistics industry so as to increase its international competitiveness and greater participation in bulk exports - including;

- Creating awareness by the national industry and trading communities, and the service sector of the importance of effective logistics organisations for commercial success and economic development of South Africa,
- to organise corresponding public relations campaigns;
- to become a repository for international best practice in trade and industry logistics management;
- to be the focal point and facilitator of discussions regarding the organisation and management of logistics related training and formal education in South Africa;
- to evaluate all existing or planned logistics training and education programs, as well
  as advisory services-public and private-in South Africa;
- to act as advisor to those needing assistance to introduce or streamline trade and industry logistics organisations, or to arrange for logistics related personnel training;
- to act as a facilitator of logistics related information exchange and professional dialogue among national businesses;

- to organise special workshops and seminars on selected topics of logistics organisation and management;
- to provide technical assistance in cases where no local expertise is available;
- to establish and maintain professional contacts and expert exchange programs with similar organisations in other countries; and
- to facilitate training for South African logistics personnel at reputable foreign institutions.

The organisational and procedural arrangements for this process clearly needs to be the subject of intensive debate between TISA and the leading professional associations, institutions of higher learning and Government bodies involved in the Project. It is critical that private sector give its full support to this as it will be one of the main beneficiary in this process. The National Ministry of Transport, (NDOT) would to participate in this process, as it is the custodian of Transport and Port regulation in the country.

In order to eliminate posturing, this process should be established as an independent "foundation of public utility" within TISA. Naturally, budgetary consideration needs to be given in developing this and it would be in the DTI (Department of Trade and Industry) to provide initial support to this initiative as part of its ongoing effort to promote industry in South Africa.

#### POTENTIAL DEVELOPMENTS

Many South African businesses and public institutes would benefit from this initiative.

## Institutional development;

Vocational schools and universities will develop special curricula and degree programs in trade and industry logistics. This means setting-up of new schools, which requires new teachers, material and other factors that go with new establishments.

Given South Africa's currency exchange rate advantage when compared with Europe, English as commonly used medium of instruction, it should be attractive to foreign interests which in itself would have a major positive multiplier effect on the economy.

## **Development of new career opportunities**

At present South Africa produces thousands of graduates per annum, be it in high school and/or tertiary institutions. A great number of these graduates are not employable in growth sectors for a variety of reasons, one of which is inappropriate qualification. The development of appropriate curriculum and tertiary training and a gradual shift in the control of shipping related activity to the local markets would be auger well for coastal communities in particular as shipping/ marine logistics career orientation can lead to new career opportunities.

#### **ORGANISATIONAL EFFICIENCY**

Local organisations stand to benefit greatly from a sturdy supply of highly trained logisticians. As foreign based companies gain confidence in the local capability, given the relatively lower cost of managing their logistics requirement s in South Africa, it is plausible that more and more logistics requirements would be channelled to local organisations.

## Leveraging-off Bulk cargo base: "CARGO IS KING"

Shipping, like other transportation sectors, is a derived demand industry. RSA has over 134 million tons of bulk cargo in exports annually (NPA statistics, 2000/2001). Ship-owners depend on sizeable and sturdy flows of cargo to operate successfully. Therefore, South African exporters of bulk commodities should amass their buying power and influence local control of various "strategic" services in the exports value-chain.

#### **Incentives for exporters to trade Cif**

The EU, the USA, despite free trade agreements, continue to support their strategic industries, namely; Agriculture, steel and so on.

South Africa recognises, mining as one of its important sectors in terms of:

- Transformation
- Black economic empowerment
- Job creation
- Contribution to the Bop account.

Therefore appropriate policy intervention should be developed to facilitate the above listed objectives.

Some of the policy features should include;

- Developing an export credit system with bulk exporters of major commodities for every (US) dollars worth of logistics services performed locally-based organisation.
- ii. A training & development scheme be incorporated to the advancement of local residence in the field of logistics on exports of bulk cargoes. This scheme should include ship-broking, insurance, crewing and manning service.

The DTI and Treasury departments have a major role to play in developing, entrenching and monitoring this initiative if success is to achieved in developing local logistics services in the exports of Bulk cargoes.

#### RECOMMENDATIONS

It should be stated at this point that efforts to increase the involvement of RSA-based organisations in the arrangement of transportation of bulk exports should not involve any draconian and anti-competitive measures such as cargo reservation and flag and port discrimination practices

Given today's trade climate, GATT, WTO and other internationally accepted practises, RSA should take full advantage of its position in terms of leveraging off its substantial bulk cargo base as well as incentives for exporters to trade on an Fob basis.

In the 1970's South Africa took bold and decisive steps to establish what has become some of the world's most productive bulk port facilities in Saldanha and Richards Bay. These facilities enjoy huge volumes of bulk cargo from the South African export sector and from this process should be put in place to encourage this export sector to review their terms of sale in a manner that relocates the power to arrange shipping and related logistics back in RSA without negatively impacting the trade.

The natural consequence of such a move would be the creation of locally-based shipping employment opportunities, a robust shipping insurance and related financial services sector. All of these would have a hugely positive multiplier effect on the economy and begin address the distortions created by the current Fob-export practices. A progressing trade and shipping environment would lead to a sturdy shipping career development in society hence support institutions and enrich RSA with a skills set that is in demand globally.

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