# CABOTAGE AND THE FUTURE OF SOUTHERN AFRICAN SHIPPING

**Should South Africa Enact A Maritime Cabotage Policy For The Future of Operation Phakisa?**

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**ABSTRACT**

How far should economic, political and strategic military sovereignty of a state be pursued? Should national, regional or ultimately international interests reign ultimately? Cabotage as domestic shipping and coastal trade has become of increasing interest to the future of seaborne trade, the challenges of maritime economic growth, sustainable development, education, law, politics and militarily globally. Those championing it cite these arguments, whilst those against consider cabotage as protectionist, expensive, socially inequitable, economically, administratively and legally challenging to enforce. However, recognising its pivotal significance as an increasing concern to the African Union and individual African governments uniquely proposing a maritime economy as its continent’s future, this precursor report considers the implications of whether South Africa, the most significant African economy of 150 years (historically without this policy), should implement cabotage to support its vision of a maritime economy via Operation Phakisa, or not. It defines cabotage and existing supply chain requirements, providing a literature review of historic successes and failures in Africa and beyond. It identifies South Africa’s maritime shipping/cabotage history and current status, assessing potential advantages, disadvantages, risks and opportunities for cabotage in South Africa, as possible implications to further guide policy makers and other key stakeholders committed to Operation Phakisa and the future of Southern African shipping not just locally but across the African continent as an African case study.

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## CHAPTER 1: INTRODUCTION AND BACKGROUND

What is the future of Southern African shipping? Why does it matter? With 2758 kilometres of ocean coastline and an Exclusive Economic Zone exceeding 1,500,000 square kilometres of ocean, the South African coastline is second only to the Somalian coast in terms of African geographical significance and perceived resource potential. Geopolitically, the Cape of Good Hope ranks along with Cape Horn, the Suez and Panama Canals as among the most significant maritime trade routes in the world. Durban Harbour ranks in terms of actual and potential containerised cargo throughput as the most significant harbour not only in Africa but the Southern Hemisphere. The South African government under the ANC leadership and President Zuma in 2014 came up with an indigenous African initiative: Operation Phakisa, which considers that South Africa’s future lies in its development of a maritime economy. However, one of the perceived greatest impediments to this vision includes the fact that South Africa up to 2015; lacked a single merchant vessel of its own, being reliant exclusively on international operated carriers. Unlike other countries it has never adopted a policy of cabotage or reserved coastal shipping and routes for domestic operated, owned, managed, financed, crewed, repaired, constructed or traded vessels. It has avoided preferential protectionist measures, legal, financial or other incentives and deterrents throughout its history. With the liberalisation of trade barriers combined with increasing globalisation, its former cargo fleet of over fifty vessels disappeared within several years to 0. However, in September 2015, The Vuka Marine bulk carriers Cape Orchard and Cape Enterprise became the first South African flagged merchant vessel since 1985, to service iron ore for Anglo-American, one of South Africa’s most significant corporations.

Therefore, cabotage is being increasingly perceived as a significant part of ensuring Africa’s true economic and political sovereignty through the maritime sector. Ruppel and Bian (2016) identify that to take back the seas from international fleets; African governments are prioritising cabotage as a strategy regardless of the constraints, challenges and risks. The African Union (AU), through its 2009 African Maritime Transport Charter objectives include ‘*promoting the establishment of national and regional shipping lines and provide them the assistance necessary for their success (Article 8)* including legal policies, cooperation, financial incentives and a dedicated specific fund (Article 13)*.*  The 2012 African Union, Africa’s Integrated Maritime Strategy, specifically challenges governments to support African merchant fleets and become world leading maritime powers by 2050. Article 3: 1 states Africa to *“Declare, articulate and implement harmonised maritime transport policies capable of promoting sustained growth and development of African Merchant fleets.”* The SADC Protocol on Transportation, Communication and Meteorology (Article 8.2) seeks a consistent, coordinated maritime and inland waterway cabotage policy including the promotion of ship owning, ship registration, ship operations and slot chartering, the growth and development of a viable SADC Merchant Shipping Industry, including the role of concessions and incentives to improve competitiveness, tonnage capacity in member states, including enhanced use of coastal shipping and feeder services and endorsing joint ventures and alliances between ship owners to promote economies of scale, similar to the international liner pooling arrangements. Locally, South Africa is currently reviewing its historic position of avoiding cabotage through potential Cabotage Laws, which more clearly articulate Operation Phakisa (October 2015). With Africa’s 2 most significant seaports, the development of a maritime cluster, the pursuit of maritime education and a possible dry port in its economic hinterland, the KwaZulu-Natal provincial government has prioritised cabotage as part of an Integrated Maritime Strategy. The South African Maritime Safety Authority (SAMSA 2013) proposed utilising African shipping and coastal trade to support infrastructure development and the growth of the African maritime economy

However, despite being perceived as integral to the future of South Africa and Africa’s maritime power, as a policy, cabotage in Africa has not faced the research benefits of the developed world lacking successful case studies outside Nigeria. This report represents a professional African maritime economist perspective that proposes to evaluate cabotage from the perspective of Operation Phakisa… If Operation Phakisa is to be a success, if it is to represent Africa’s future as a maritime power, then the future of Southern African shipping and cabotage requires assessing via the extent to which it satisfies or fails affected supply chain stakeholder requirements and the extent to which it might potentially affect trade, economic and social development and can be coordinated with proposed policies in aquaculture, the offshore gas industry, maritime beneficiation and other initiatives. This report therefore proposes to consider if cabotage really does represent the most optimal future for Southern African shipping and especially whether it addresses Operation Phakisa and this projected maritime economy via a coastal highway, given historic successes and failures not just in South Africa but also internationally. This research potentially serves as an African case study prototype for existing and future governments, the private sector, academics and other stakeholders including consumers to assess whether Africa needs cabotage, its own merchant fleet, more flags of registry and support, or whether this would adversely affect existing arrangements with international shipping…

## CHAPTER 2: LITERATURE REVIEW

## 2.1: Defining Cabotage: Existing Laws and Policies

**Table II: Global Countries and Cabotage Policies**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Cabotage** | **Subsidies** | **Crew** | **Ownership** | **Construction** | **Reflag** | **Legislation** |
| **Algeria** | X | X | X | X |  | X | Ordinance 68-83 |
| **Argentina** | X | X | X | X |  | X | Decree 19492 |
| **Australia** | X | X | X |  |  |  | 1912 Navigation Act |
| **Belgium** |  | X | X |  |  |  |  |
| **Brazil** | X | X | X | X | X | X | 1967 Shipping Law |
| **Bulgaria** | X | X | X | X |  |  | Code For Commercial Navigation |
| **Canada** | X |  | X |  | X | X | Canadian Shipping Act |
| **Chile** | X | X | X | X |  | X | Maritime Transport Laws |
| **China** | X | X | X | X |  | X | Water Transport Regulations |
| **Columbia** | X |  | X | X |  | X | Decree 2451 |
| **Denmark** | X | X | X | X |  | X | Merchant Marine Act |
| **Ecuador** | X | X | X | X |  | X | Cargo Reserve Law |
| **Egypt** | X |  | X | X | X | X | Law 63 1961 |
| **Finland** | X |  | X | X |  | X | Right To Pursue Business |
| **France** | X | X | X | X |  | X | Customs Code |
| **Germany** | X | X | X |  |  | X | Coastal Shipping Act |
| **Greece** | X |  | X | X |  | X | Legislative Decree |
| **Honduras** | X |  | X | X |  | X | Commercial Code |
| **India** | X |  | X | X |  | X | Merchant Shipping Act |
| **Indonesia** | X | X | X | X | X | X | Regulation PP 17 |
| **Israel** |  |  |  |  |  | X |  |
| **Italy** | X | X | X |  |  | X |  |
| **Ivory Coast** | X | X | X | X |  |  | National Shipping Policy |
| **Korea** | X | X | X | X | X | X |  |
| **Japan** | X | X | X | X |  | X | Japan Ship Law |
| **Nigeria** | X | X | X | X | X | X | Cabotage Act |
| **Peru** | X | X | X | X | X | X |  |
| **South Africa** |  |  |  |  |  |  | None |
| **United States** | X |  | X | X | X | X | Jones Act |
| **Venezuela** | X | X | X | X |  | X |  |

To ensure that any decision to implement cabotage profits from past experience and that stakeholders can determine/understand whether it provides the answer to the future of South African shipping and Operation Phakisa, this chapter considers it necessary to define cabotage and outline stakeholder requirements of supply chains, which might be affected by its enactment. It therefore provides a literature overview of historic international successes and failures to emphasise how cabotage policies (or their absence) may be learned from to minimalize externality, opportunity and maladaptation costs for stakeholders. An example of national country cabotage policies is presented in Table I above. In the absence of a South African example, the 2003 Nigerian Cabotage Act (Akpobolekemi 2012; Uba 2015)defines ‘cabotage’ or coastal trade as: ‘*The carriage of goods by vessel or any other transport mode from one place in Nigeria or above waters to any other place in Nigeria either directly or via a place without Nigeria and includes the carriage of goods in relation to the exploration, exploitation or transportation of the natural resources of Nigeria, whether in or under Nigerian waters.* The Nigerian Act extends cabotage (Agoha 2008), so that any vessel (including cargo, passenger, bunkering, tugs, warships and barges) engaged in domestic coastal trade must be constructed, owned, operated, administrated crewed and registered under the Nigerian merchant fleet shipping register. However, stakeholders can formally apply for a waiver of these conditions if no local substitute is available. Nigeria also specifically excludes international, transit and transhipment cargo. Both conditions are endorsed by many countries which do practise cabotage so as to avoid unnecessary and expensive barriers to international trade and potential reciprocity by foreign powers. The Nigerian shipping register requires registration of all vessels –foreign, bareboat chartered, joint venture owned and wholly Nigerian owned vessels

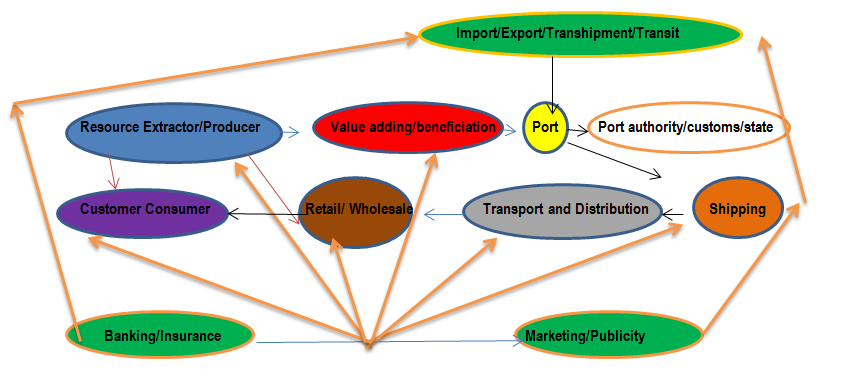
Canada (Hodgson and Brooks 2012) similarly define cabotage as reserving the movement of goods between two ports or places within the same state but extend this to passengers as well, allowing for the possibility of domestically operated ferries and cruise ships. New Zealand’s cabotage policy definition (Cavana 2004) also considers cargo must geographically commence and terminate within New Zealand’s boundaries, with similar crew, registration and ownership/operated requirements and waiver policy. In reviewing international cabotage policies for the over 40 countries which restrict shipping, if South Africa is to enact indigenous cabotage laws to complement Operation Phakisa, it will need to consider clear definitions satisfying stakeholder requirements of minimal administrative and legal regulatory compliance costs. South Africa’s policy makers will need to consider which areas of cabotage will be implemented. Will it extend to passengers for cruise ships and recreation? Will it cover all cargo and vessel types –or reserved specifically for dry bulk, neo-bulk/reefer, containerised, petroleum liquefied gas and oil or fishing vessels in particular?

To revise cabotage laws; South Africa will need to consider questions of ownership, port entry, customs, crew origin requirements; registration, administration, finance (including whether to introduce taxes and subsidies), brokering, tax, legal enforcement, construction and repairs, management and control. Is Cabotage about reflagging on a ship register and ships of entry to construct a domestic merchant fleet; is it to dominate coastal trade and does it extend to shipping finance and insurance? South Africa’s Maritime Transport Policy (South African National Department Of Transport, 2008) would also have to be revised to consider how cabotage might affect other legislation including safety, security and intermodal transport policies both internationally and domestically but would need to consider all stakeholder requirements. This report considers that a failure to clarify cabotage and the exact implications of cabotage upon all these issues; would significantly enhance the probability of its failure for potential emergent stakeholders lacking historic experience in international maritime law.

## 2.2: Cabotage Stakeholder Requirements

To establish successful cabotage laws and policies within South Africa and potentially across Africa, this review recommends that existing and prospective industry stakeholders are consulted across Figure I’s proposed supply chain from producer to ports, shipping, intermodal transport, retailers/ wholesalers, customs, government, the financial sector to consumers are consulted to consider their concerns and requirements are addressed, given the significant policy implications for the future of Southern African shipping, both adverse and positive. In particular, this report would extend consultation to members of professional representative associations including the Maritime Law Association of South Africa, the South African Shipowner’s Association, the Road Haulage Association, private sector corporations, Sanral, Transnet and other entities. These requirements include that regardless of cabotage, these stakeholders desire certainty that functions will exist with minimal disturbance risk. They expect port authorities and other stakeholders involved are sufficiently informed, prepared and aware about proposed cabotage policies to prevent unnecessary delays. These stakeholders anticipate that they will not lose any functional requirement or be adversely affected by any related cabotage changes. If cabotage is to be commercially, technically and socially feasible it must satisfy market demand with supply to adequately provide a consistent, adequate, profitable and productive service capable of allowing for fluctuations in growth, existing capacity and future projected growth. It needs to be commercially viable at sufficient economies of scale, able to recover fixed and variable costs without external funding. Cabotage therefore needs to satisfy the following Table II stakeholder requirements identified from this reports’ consultation with key stakeholders. The most significant is that it will not adversely impair nor be inconsistent and incompatible with existing tax, trade, security, environmental, legal, technical, training and other requirements.

Figure I: A Simple Commercial Supply Chain



|  |  |
| --- | --- |
| **Table II: Aggregated Cabotage Stakeholder Requirements** | |
| **Expectations of Supply Chain Service Provider** | **Commercial/Community Expectations** |
| Provide sufficient information | Availability |
| To consistently update information | Promptness/swiftness of services/infrastructure |
| Security | Allocative/Productive Efficiency |
| Cost Competitive | Functions are modernized as much as possible |
| Productive/Efficient – swift and accurate processing | Direct service/transport connections exist |
| Reliable/frequent functions of sufficient quality | Productive, trained labour responsive to needs |
| Satisfying unusual requests – altering schedules/ flexible to changing circumstances | Sufficient Capacity exists  Efficient – utilises capacity/economies of scale |
| Sufficient quantity of functions exists | Commercially profitable |
| It satisfies marginal caller requirements | Equitable in satisfying the user pays principle |
| It avoids delays/strikes etc | Minimises negative externality/congestion costs |

## 2.3: Historical Successes

This research report provides a literature review summary of historical and contemporary world cabotage policies that succeeded with certain factors that contributed to their potential success. It proposes that if South Africa as a country is to consider implementing cabotage as part of Operation Phakisa; it could reduce potential externality, maladaptation and opportunity costs in learning from other case studies that triumphed both in Africa and beyond. Although nationalised shipping companies as with other public enterprises have often failed in Africa, one notable success is that of developing a flag of convenience or domestic shipping registry. Liberia, the only African state never to be colonised and occupied by a foreign power is also one of the three leading world nations in an international merchant shipping fleet register, with Panama and the Marshall Islands. Its success has proven that despite offering favourably low taxes, it has provided one of the 2 greatest sources of consistent historic revenue, contributing more than direct taxation throughout Liberia’s history. All three countries provide maximum flexibility to encourage registration, with no restrictions on mortgage registration, ownership, construction or financing, low taxes based on tonnage as a set amount per gross standard ton –simple to administer and enforce. Additionally, unlike Panama which places crew restrictions, Liberia places none and is favoured internationally over Panama due to its stringent environmental, safety, security and port health codes, its vessels seldom humiliated by arrest. Panama places no age limit on vessels, exempts its vessels from income tax and provides discounts to encourage recreational vessels to register. It also allows charterparties for voyage and time charters with dual Panama and foreign control.

In Europe, cabotage is selectively applied under the European Union Council Regulation 3577/92 and defined as geographic *‘the movement of cargo and passengers by sea between ports situated in geographical Europe or between those ports and ports situated in the non-European countries having a coastline on the enclosed seas bordering Europe. It includes domestic and international maritime transport, including feeder services, along the coast and to and from the islands, rivers and lakes. The concept of SSS also extends to maritime transport between the Member States of the Union and Norway and Iceland and other States on the Baltic Sea, the Black Sea and the Mediterranean’.* It provides freedom of coastal trade, shipping and navigation only to full members who have ratified this regulation. This legally allows European countries to implement their national cabotage policies against non-European powers, regardless of World Trade Organisation policies on the proclaimed freedom of seaborne trade Member states still reserve coastal trade and crew for domestically operated ferries and other small vessels less than 6500 GRT. In 1997, Llanto and Navarro (2013) estimated cabotage directly supported around 50,000 jobs in Southern European countries for both passenger and freight traffic. Hodgson and Brooks (2012) cite Canadian justification for its cabotage policy in order to be cost competitive with indirect European cabotage policies, exempting income and corporate tax for vessels and penalising non-European fleets with a higher tonnage tax. Coastal shipping in Europe is further gaining increasing support to provide incentives to support short sea alternatives to land based intermodal transport substitutes. Ng, Sauri and Turro (2013) identify environmental considerations, particularly to reduce greenhouse gas emissions, far greater per ton-kilometre for air, road and rail than for shipping and to reduce considerable road traffic congestion, delays, accidents and other externality costs associated with trucks.

Most countries in South, Central and North America continue to maintain cabotage policies to varying extents as illustrated in Table 1 defended by various stakeholders for domestic cargo, perceived as necessary to support local employment, economic development, revenue and equitable given other countries reciprocally support/endorse their own protectionist, trade restricting measures. Boske (2001) identified Argentina, the Bahamas, Brazil, Canada, Chile, Columbia, Ecuador, Honduras, Mexico, Peru, Uruguay, the United States and Venezuela, none of whom have rescinded such policies in 15 years. Yet, when Venezuela legalised foreign vessel bareboat charters, freight rates halved, significantly increasing consumer welfare at the expense of producers. However, each country recognises the legal impracticality of cabotage restrictions for international/open shipping, transit and transhipment cargo based on high trade volumes and potential threats of reprisals by other nations. Although Uruguay’s merchant fleet is insignificant, it favours cabotage in response to its neighbours. There are few internationally competitive shipping lines that simultaneously participate in domestic trade, given the direct/indirect support and other advantages enjoyed by domestic companies in Latin America and beyond. The Bahamas have capitalised on their strategic Caribbean location as a cruise vessel hub by revising cabotage laws to be registered in The Bahamas and employ local crew. As this report will identify under Chapter 3, this provides another success which could be endorsed by South Africa/ Africa for foreign cruise vessels including Mediterranean Shipping Cruises but could also revise to offer incentives to encourage indigenous African cruise, ferry and passenger vessels to be formed. Ecuador and Venezuela offer subsidised fuel to domestic vessels as an alternative form of cabotage subsidy. In contrast, Honduras exploits cabotage to supplement government tax revenue, taxing foreign vessels rather than directly subsidising its own flagged vessels. These countries have managed to preserve these policies – (in the US, for decades) with providing benefits for certain stakeholders, even if restricting trade and creating deadweight loss to others based on potentially desirable trade that does not take place.

If South Africa is to endorse cabotage, this report recommends learning from its historical success in Brazil, its BRICS partner with over 1100 registered vessels. Although as restrictive as the United States and Peru, Brazil has exploited its strategic significant coastline and geographical position, combined with reserving its mineral resources, agricultural produce and petroleum exports on domestic rather than foreign vessels, encouraging both state owned and private corporations to be patriotic, to ensure its triumph. It has also significantly modernised efficiency at the majority of its 36 ports. De Valois *et al.* (2011) considers several similar advantages to the growing trend for cabotage via short sea shipping to Europe as countries face significant traffic congestion, safety, accidents, health, noise, environmental and other externality costs from trucks, seeking incentives to facilitate intermodal transport substitution for shipping to move from less than 20% to over 25% by 2025 and remain commercially viable. Additionally it reduces infrastructure repair, maintenance and construction costs. However Brazil has river basins, whereas South Africa would need to consider reinvesting in rail for its substantial geographic hinterland lacking seaport access, wherever coastal shipping could not work. In contrast, Panama whilst not formally endorsing a cabotage policy without imposing restrictions in common with Israel and South Africa, in contrast has favoured Liberia in developing the world’s largest merchant shipping fleet register.

The significant diversion of trade to Asia with globalisation has implications in its policies developing local maritime fleets. China and Japan similarly ensure the success of their cabotage policies and domestic shipping to Brazil through providing significant publicity and financial/legal industry incentives to promote both domestic trade and exports abroad, which favours local companies over foreign ones. Over 200 million tonnes of Japanese Steel in revenue, improves the balance of payments as does China, reducing foreign revenue costs. Policies to support local training, access to maritime finance credit and other incentives such as requiring Free On Board incoterms for the carriage of goods by sea in maritime law, ensures that institutional support provides necessary experience and support for initial infant industry companies to eventually develop through reserved cargo and preferential trade, at the expense of African, Pacific and other nations that do not or cannot afford to develop their own fleets, with competitive advantages undermined. However, in response to World Trade Organisation challenges of trade discrimination, Japan has liberalised cabotage to allow bunkerage, tugs and towing, pilotage, repairs and other maritime/port services to promote competitiveness. Finally, since 1937, the Philippines (Llanto and Navarro 2014) have pursued cabotage. However, whilst cabotage has preferential treatment it does not exclude foreign vessels where no local substitute is available to ensure no restrictions to trade. It has also reformed to preserve competitiveness by reviving maritime safety and health standards, mandatory insurance and incentives to promote fleet modernisation to prevent the issues of obsolescence and poor standards encountered in the United States, where the Jones Act domestic monopoly of shipping establishes moral hazard to reduce costs to increase profit further.

Unlike other countries in determining whether or not to endorse cabotage, South Africa has the potential to learn from historic successes and failures. It can potentially ensure the competitiveness of a domestic mercantile marine with international rivals to further stimulate its economy as the gateway to Africa, rather than non-African countries via Operation Phakisa, detailed as an additional opportunity in Chapter 3. This review also proposes that South Africa and other African countries can profit through considering the comparative success of 13 years of cabotage laws in Nigeria which used its 853 kilometres of coastline and 3000 km of inland waterways to facilitate coastal trade. Akpobolekemi (2012) identified developing indigenous shipping through providing incentives to the oil and gas industry (95% of the local fleet), helped to increase employment, skills and training, value added beneficiation and stimulate local economic development rather than being shipped by China or Europe, as with South African commodities. Introducing a tonnage tax provided additional government revenue whilst improving the balance of payments by reducing current reserve pressures.

A local merchant marine also develops potential national security, not just economically but militarily in the case of potential piracy or conflict around the Gulf of Guinea to facilitate regional stability, as often cited by those in favour of the US Jones Act. It also aims to improve the safety and protection of the marine environment through having Nigerian vessels adhere to Nigerian local laws and standards, rather than minimal standards of other shipping registries as flags of convenience. It is also cited to ensure local transport competitiveness with foreign shipping fleets. In particular, Nigeria considers cabotage to be advantageous in exploiting further economic opportunities from its estimated 22.5 billion m3 of oil and 3.5 trillion m3 of gas reserves. It has favoured partnerships with foreign countries under cabotage and allowing cabotage waivers wherever local policies fail as necessary precursors towards developing a completely indigenous fleet, to benefit from international experience, to compensate for inexperience. Simultaneously it is significantly investing in maritime education and vocational seafarer training, including significant publicity campaigns to alert its youth/ public to the potential prospects of the maritime industry, to simulate interest and support, similar to South Africa. The success of cabotage is demonstrated in a growth of the fleet from 127 vessels in 2000 to 311 in 2011 and then 184 in 2012 but a tonnage increase from 56,205 to 3,322,883 in the same time period.

**2.4: Historical Failures**

Examples of failed cabotage policies exist throughout all continents as arguments to question whether it represents South Africa’s future in any form or whether it can be modified to avoid historic catastrophes including a number of African national shipping companies that were not commercially, technically or physically feasible. Although, to a certain extent cabotage policies have worked in Latin America, Boske (2001) noted that freight rates penalised domestic consumers heavily from a national domestic monopoly on coastal shipping, halving only when foreign companies were allowed to enter in partnership with locals. The source identifies the economic inefficiency, waste in emissions and other shipping costs in re-routing foreign vessels to other international ports, rather than permitting access to coastal trade from domestic port to port. Argentina’s shipping companies provided an example of failed domestic shipping monopolies, when its government incurring financial pressures could no longer afford to cross-subsidise its fleet to the same extent, several companies faced bankruptcy being individually economically uncompetitive. This report proposes that if a Cabotage Fund is established along Nigeria’s, that its loans are repayable –each applicant has to come up with viable business plans that do recover costs and make profits after a certain time –similar to the South African Land or Development Banks. Both Europe and Brazil have noted significant logistical, administrative, legal, financial and other challenges in pursuing short sea shipping or intermodal transport substitution, given high lobbying power pressures and strikes by truck, increased traffic congestion, perceived delays and other poor publicity/reputation from policy stakeholders due to poor information and miscommunication creating significant economic impact costs across various supply chain stakeholders and stages along with the entire supply chain. Aged vessels, limited speed rail connections, unimproved supply chain infrastructure, equipment and poor productivity further discourage shipping, especially without specific funding. Shipping economies of scale are distance dependent to be financially viable and few operators exist to offer significant competition pressures to road or rail to lower rates and still remain profitable. Trucking still serves hinterland connections more effectively –delivered point to point rather than shipping which still requires discharging and transferring to road/ rail/air at its destination.

The world’s largest economy and historic championing of globalisation and trade barrier liberalisation, has paradoxically applied that standard to others but not itself. United States protectionist cabotage was formalised in 1920 by theUS Merchant Marine Act of 1920 (United States Congress 1920), most frequently described as the Jones Act. This act and its supporters justify national cabotage through the following: *‘It is necessary for the national defence and for the proper growth of its foreign and domestic commerce that the United States shall have a merchant marine of the best equipped and most suitable types of vessels sufficient to carry the greater portion of its commerce and serve as a naval or military auxiliary in time of war or national emergency, ultimately to be owned and operated privately by citizens of the United States to do whatever may be necessary to develop and encourage the maintenance of such a merchant marine and in so far as may not be inconsistent with the express provisions of this Act, the Secretary of Transportation shall, in the disposition of vessels and shipping property in the making of rules and regulations and in the administration of the shipping laws keep always in view this purpose and object as the primary end to be obtained.’*

However, despite significant support among the maritime industry whose interests it serves to a point, other sources consider United States cabotage to have failed being irrelevant and ultimately expensive in an age of increasing globalisation. Hill (2013) for example cites a 1995 United States International Trade Commission estimated $2.8 billion loss of consumer surplus and that opening up to foreign competition potentially could aid lower freight rates by 26%. However, whilst consumers might benefit, certain domestic shipping companies and maritime industry would lose –with profits diverted to foreign, more cost-competitive shipping firms. As a policy, cabotage has failed to prevent the significant decline in US registered merchant maritime vessels from over 2300 in 1946, to less than 200 at present and with few commercial shipyards remaining that could be internationally competitive. It indicates how local exports are penalised being cheaper to import from Canada/Mexico/the Caribbean than from one US port to another; creating significant trade loss and trade diversion not just trade creation. The fleet decline also penalises trade as vessels are not always present in supply to satisfy demand, creating market failure The Alliance For Innovation And Infrastructure, (2016), supported by Beason *et al.* (2015), further consider the Act to be protectionist, pointing out that domestic monopolies seldom have incentives to innovate, unless cabotage policy specifically requires it or offers certain financial and other incentives.

The United States fleet is known for being increasingly technologically obsolescent lacking the same environmental, health, safety and other technical standards as potential international competitors, as companies experience moral hazard to retain more profits, despite higher freight rates. It identifies the significant loss to local export industries and the balance of payments where high US wages ($11,000 per day on average versus $2000 for foreign) and freight rates encourage importing of cruder, inferior oil rather than refining its own supply from Texas from domestic port to port. Lewis (2013), estimated that the net deadweight or consumer welfare loss at around $578 million. The source identifies substantially higher crew, administrative, protection and indemnity insurance, maintenance and repair costs than international competitors. As a fleet it is unable to remain internationally competitive despite a domestic trade monopoly and the significant Maritime Security Program fund subsidy, justified by those in favour of the Jones Act as necessary to secure government access to sufficient vessels and trained seaman in the event that armed conflict was to require such numbers.

Hodgson and Brooks (2012), have identified similar failures for Canada despite geographic advantages being more isolated from international shipping competitors and financial support. Canada’s cabotage policies especially for Great Lakes shipping with restricted navigation capacity during winter has received limited support from local supply chain stakeholders providing economically insufficient demand along with increases in seaway and coast guard charges, something the South African government may need to consider amidst the hazards of its over 2000 kilometre coastline and internationally expensive port pricing. Canada’s fleet has faced 11 out of 20 companies that commercially failed despite the coastal monopoly (over 90% of trade volumes is carried by the top 3), reducing freight rate competitiveness for other supply chain stakeholders. Although a waiver system has been proposed when local demand exceeds supply, high fees and administration costs discourage international competitors. Canada is currently considering liberalising its flag of registry to learn from the international success of Liberia.

As a policy, cabotage under the 2012 Coastal Trading (Revitalising Australian Shipping) and Navigation Act has met a number of significant challenges for Australia, though those in favour have indicated its environmental sustainability, increased efficiency, maritime safety, professionalised education at the Australia Maritime College in Tasmania and economies of scale for its large coastline, in contrast to intermodal rivals. Australia is providing tax and other incentives to encourage domestic shipping fleet registration including import exemptions for off shore oil/gas vessels that register. However, it has failed to avert the decline in locally registered vessels from 55 in 1995 to 22 in 2015, with minimal support from national supply chain stakeholders who conservatively prefer the historical reliability and security provided by tested road and rail alternatives. Additional arguments proposed for cabotage’s comparative failure in Australia include high labour costs and fringe benefits, less labour flexibility, significant strikes and union issues, a lack of modernised and integrated seaport infrastructure to facilitate trade contributing to significantly higher freight rates than international equivalents with inconsistent legislation and no tax incentives. High regulatory compliance costs in customs, health and safety, crew rights, insurance, migration, income tax and bureaucracy/administration costs provide further deterrents –including a 5 voyage minimum requirement to qualify as a foreign vessel under its single permit waiver policy when domestic vessels fail. Deloitte Access Economics (2012) estimated that modifying licencing requirements would increase coastal shipping costs and freight rates by an 16% average, further encouraging imports over exports for local trade. In addition road and rail remain significantly supported by government subsidies, undermining potential cost competitiveness further. Webb (2004) indicated that the Australian government ceased direct financial support of its coastal cabotage policy since 1912, in December 1999, where the subsidy was replaced with a 100% fuel rebate –to rail and shipping. Additionally, a scarcity of key skills and education combined with an aging seafarer population, for crew which Australia has resorted to importing from abroad for its maritime schools, lacking local young Australian interest as a professional career has further assisted cabotage to fail in Australia

Finally in Asia, Suffia *et al.* 2013 considers cabotage in Malaysia to have failed in achieving a market efficient and competitive industry that satisfies consumer demand and stakeholder requirements of productive efficiency –transported at the lowest, most efficient cost and allocative efficiency –those most wanted are those produced. Malaysia does have several shipping companies including the government founded Malaysia International Shipping Corporation which has survived since 1968 primarily due to government support in providing a guaranteed cargo through the oil petroleum conglomerate Petronas, yet still represents less than 20% of all Malaysian cargo throughput traded; despite high economic growth rates that would provide demand if services were adequate. The source considers cabotage as trade protectionism in restricting shipping market access for more modern, efficient, cost competitive vessels and argues that a policy of cabotage would fail, if not provided with sufficient enforcement resources and capacity

## CHAPTER 3 THE PROSPECTS OF CABOTAGE FOR SOUTHERN AFRICA’S FUTURE

## 3.1: History

Although South Africa has never formally initiated a cabotage policy to restrict domestic shipping as have other countries and it currently possesses only 2 merchant vessels just commissioned in 2015, various stakeholders, companies and individuals have sought to provide domestic shipping services throughout South Africa’s maritime history. This report therefore recommends that in order to assess the prospects of cabotage for Southern Africa’s future through Operation Phakisa in subsequent sections, it is advantageous to consider this past, especially factors which caused previous shipping to fail. Fishing vessels, local recreational and miscellaneous minor vessels have and remain South African owned and operated throughout this maritime history. During the British early colonial, post Napoleonic era, local shipping companies including the Barry’s; Thesen; Stephan Brothers; Smith, Webster and Co; Price and Smith’s Coasters out of Cape and Natal ports.After the Anglo-Boer War when the British Imperial Government devolved considerable autonomy domestically in the 1910 Union of South Africa, Grindrod initially Unicorn Shipping (which still survives in logistics, transport and financial services to this day in 24 countries), was founded in 1911 by Captain John Grindrod. In 1948, SAFMARINE Corporation was founded, (also still commercially prosperous though not South African) to provide another South African patriotic alternative to foreign shipping, especially as foreign affairs gradually became more isolationist with the election of the Nationalist Party Government and its apartheid policy. Economically, South Africa over the next few decades would retain its leading position in Africa through its policies not only of export promotion but also import substitution or economic autarchy.

During the1950’s SAFMARINE announced a US–South Africa–Mozambique transatlantic passenger and freight service of 3 vessels: The SS Constantia, SS Morgenster and SS Vergelegen to complement the British owned Union Castle, regular steamship service between Durban, the Cape and the United Kingdom. However, many local shipping companies lacking official government interest or maritime support from the National Party government, which heavily supported railways over roads and shipping to provide secure employment for its Afrikaaner electorate, failed and annexed by either Grindrod or Safmarine or went bankrupt. One of the few South African government support options for shipping did include the construction of patrol boats and coaster vessels for the South African Rail and Harbour Board, which did conserve scarce foreign exchange through providing coastal fleet from 1 to 4 ships between 1926-1945, although 2 were sunk by the war. South Africa also maintained its own vessel for fisheries research (Africana I/II), inshore research (Sardines) and eventually when it became the first and only African nation with an Antarctic research station, its own Agulhas research vessel (1978-2012 and Agulhas II -2012+). A couple of local whaling vessel companies including Irvin and Johnson (still prominent in fish trade) also survived until commercial whaling became internationally banned apart from ‘scientific’ research. However, smaller shipping companies failed from a number of reasons, lacking private and state sector guaranteed market support especially for strategic commodities, no legal cabotage protection policy or fiscal incentives; increasing technical obsolescence and unable to compete with economies of scale when containerisation and reefer vessel technology emerged during the 1970’s; lack of public awareness and targeted publicity and virtually no chances for seafarer or maritime education outside the General Botha, SA Harbour and Railways Board or navy training vessels, either at any university, vocational college or private academy until 1986 with the Durban based private SA Maritime College and Transport School. The army and air force, enjoyed greater prestige, prioritising resources, despite the potential strategic significance of South Africa and its South West Africa, expired United Nations mandate territory of Southwest Africa’s (Namibia) over 2000 kilometre coastline.

International trade sanctions against the National Party government in response to its apartheid policies further discouraged the development of indigenous, South African cargo and passenger trade both locally and abroad. Although South Africa possessed and retains the most complex, diverse and productive of African ports, supply chain infrastructure and economies; shipping company profits on exports scarcely justified the expense of local Indian Ocean services, importing little from Mauritius, the Seychelles, Reunion, the Comoros, Zanzibar and Madagascar or from Sao Tome and Principe, Cape Verde and those limited trade partners for which relations existed. Companies which failed from limited domestic trade prospects with high fixed and operating costs included Ovenstones, Union SeaFreighters (1949-1950), Atlantic Shipping Company (1945-1946) ,Union Steamships (1946-1947) and Alpha Steamship Company (1946 to 1948), Arden Hall (1947-1951), and Van Riebeeck Lines (1950 to 1954) Neptune Shipping (1952-1955) and Cape Recife Shipping (1955), which took 1-4 years to fail without financial support from companies, the banking/ insurance sector or state. Other companies were foreign owned but registered as South African with preferential South African crew, seeking to ensure favourable government endorsement including Union Castle mail and passenger ships 1945-1977. Others such as South African Lines partnered with international firms to compete internationally but were eventually bought out as they became more successful or merged as Springbok Lines was by Safmarine in 1961.

As South Africa transferred from a Commonwealth monarchy to an increasingly isolated Republic in 1961, it became more isolated in shipping, although the state Industrial Development Corporation did purchase significant shares in Safmarine, enabling it to modernise during the 1960’s and1970’s with eight general cargo freighters, 2 tankers, four reefer and several bulk carriers, container vessels (including 4 2500 TEU vessels for European trade) and shares in Union-Castle’s passenger-mailship service. South Africa also became the world’s first nation to construct 2 emergency response salvage tugs that could be dispatched anywhere along its hazardous coastline. Unicorn Shipping also prospered in trading mineral commodities with South African trade partners in South America, Africa and Israel lacking shipping fleets of their own as competitors with several tankers and containerships. More vessels including tugs were constructed at South African shipyards. South African Lines which had been sold to the Germans; became South African as part of Safmarine. Companies that experimented with coastal trade, continued to survive only briefly includingSouthern Reefer Shipping (1962- 1978) First Freighters (1965-1967), Green R Line (1969-1976), Faros Shipping Enterprises (1971) and Rennies Coaster’s (1961-1979).Unicorn Shipping however continued until it sold its last South African registered vessel in 2000.

As apartheid ended and South Africa’s multiracial democracy emerged in 1994; South Africa’s maritime fleet declined, with increasing trade liberalisation/globalisation and competition, combined with a lack of a cabotage policy or lack of government priority. From 1994, under the Nelson Mandela presidency many South African corporations concentrated on minimising tax and other welfare obligations through offlisting onto foreign stock exchanges rather than diversifying and investing in local economic development including a maritime industry and fleet, in contrast to apartheid. They chose stakeholder requirements of cost; flexibility, speed, efficiency and reliability –supporting foreign companies rather than local shipping firms. In1993 alone, Old Mutual sold 57 domestic ships (Hare 2012), a significant decline in the merchant fleet, which continued when Safmarine was acquired by Denmark’s AP-Moller Group and no longer prioritised South African seafarers when its base was permitted to be moved to Singapore not Cape Town. Although Safmarine is owned by AP-Moller-Maersk, due to its reputation and proficiency, it retains significant autonomy as a corporate entity, but in 2011, its administration merged. Without a local cabotage policy, Unicorn Shipping and Grindrod continued to favour China and Korean over local shipyards for 42 vessels, which lacked the significant government subsidies which artificially lowered prices in the rest of the world. Only the South African fishing fleet and government departments of Fisheries, Environmental Affairs and parastatal Transnet remained patriotic, willing to support and commission a few local owned, constructed and crew vessels but insufficient and inadequate to address coastal trade concerns. Finally by 2009, one emergency salvage tug remained and the final South African domestic cargo vesselthe containership Safmarine Oranje was removed. For 6 years, the largest African economy, virtually unique in lacking an official cabotage policy among the top 45 global economies, had not one vessel until in 2015 it received its first two -theCape Orchid and Cape Enterprise under Operation Phakisa. South Africa’s 2015 flagged fleet also includes the Africana and Ellen Khuzwayo – Fisheries research vessels, the SA Agulhas cadet training vessel and the SA Agulhas 2, the bunker barges Fumana, Smit Bongani, Smit Energy and Smit Lipuma, the Offshore supply vessel Aukwatowa, the oceanographic research vessel Algoa and the patrol vessels Lilian Ngoyi, Ruth First, Sarah Baartman andVictoria Mxenge. Grindrod remains South African, committed to a cadet training programme since 1965 (as have Safmarine), however its 42 vessels are foreign flagged to take advantage of foreign cabotage incentives, lacking local substitutes from the South African government and around. Another 30-40 are estimated to be owned by South Africans but not locally flagged.

**3.2: The Present State of South African Cabotage**

The historic decline in South Africa’s domestic shipping fleet and its failure to capitalise on coastal trade is currently been revised through the government’s endorsement of Operation Phakisa. Hare (2012) summarises a number of reasons that consider why indigenous shipping and maritime trade has failed and continues to be marginalised in South Africa by its supply chain stakeholders. These include the geographical hazards of Namibia’s Skeleton Coast, the Cape of Good Hope and beyond with higher shipping risks; the fact that Transnet offer some of the highest port pricing rates in the world (Dyer 2013), the liberalisation of trucking/road haulage in the 1990’s reducing shipping price competitiveness, inadequate coastal facilities with intermodal transport connections in South Africa’s current and future port modernisation projects and free trade zones and the absence of formal and existing cabotage legislation against foreign competition or to provide incentives to participate. This section details the present state of South African cabotage policy and outlines the proposed changes of South Africa to address its absence of formal cabotage legislation and guidelines. This report considers it essential for supply chain stakeholders to consider these factors when determining whether or not cabotage really represents the future of Southern African shipping and if it can survive competitively both domestically and internationally.

The 1996 National Transport White Paper was the first attempt by the South African ANC government that specifically articulated its vision for the maritime transport sector whilst the South African Maritime Safety Authority was specifically established and legally empowered to defend South Africa’s maritime interests, complementing the 1983 Admiralty Jurisdiction and Regulation Act: ‘*To encourage and support government strategies for economic and social development whilst being environmentally and economically sustainable.’* South Africa’s maritime policy objectives specifically include the following to encourage and support the South African maritime transport industry to enable it to compete equally with the maritime carriers of other nations and South African land-based carriers:

* *‘Developing maritime awareness’, ‘*
* *Assisting in the creation and foster of an economic environment for the maritime transport industry which will allow it to compete with other nations,’*
* *Contributing to the release of the full potential of the maritime industry in South Africa*
* *The modernisation of South Africa’s shipping administration.’*
* *The establishment of a modern shipping register which is efficient, which balances the interests of the nation, shipowners and seafarers in an internationally acceptable manner, and which accords with principles of international law relating to the necessity of a genuine link between the state of registry and the shipowner in contrast to flags of convenience.’*

Figure II: The South African Merchant Fleet 1985-2015.

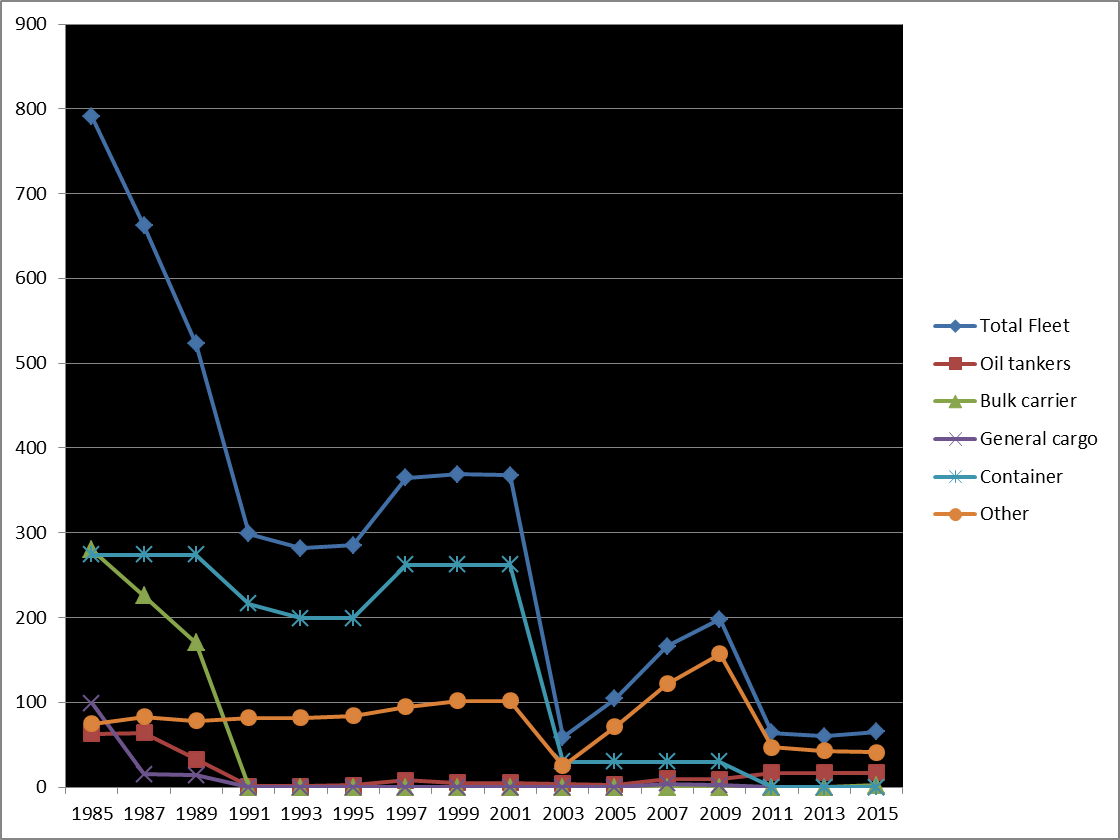


Table III: The South African Merchant Fleet 1985-2015.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No of vessels | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 |
| Total Fleet | 791 | 662 | 523 | 299 | 282 | 285 | 365 | 369 | 368 | 59 | 104 | 166 | 198 | 64 | 60 | 65 |
| Oil tankers | 63 | 64 | 33 | 1 | 1 | 2 | 8 | 5 | 5 | 4 | 3 | 10 | 9 | 17 | 17 | 17 |
| Bulk carrier | 280 | 226 | 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| General cargo | 99 | 15 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 |
| Container | 274 | 274 | 274 | 216 | 199 | 199 | 262 | 262 | 262 | 30 | 30 | 30 | 30 | 0 | 0 | 0 |
| Other | 75 | 83 | 78 | 82 | 82 | 84 | 95 | 102 | 102 | 25 | 71 | 122 | 157 | 47 | 43 | 41 |

Chasomeris (2010) notes that South Africa continues to experience a liberal cabotage exempt policy towards the maritime transport industry despite historic legislation and that currently proposed for Operation Phakisa. For example, theDecember 2003, BEE Maritime Charter proclaimed along-term vision to develop South Africa to become one of the world’s top 35 maritime nations by the year 2014,” (clause 2.1.1). It sought for **‘***a clear strategy/plan for the majority of South African cargo, going through South African ports to be carried on South African ships, to substantially increase the number of SA flagged vessels and develop new SA shipping companies that are globally competitive.”* By 2008, it aimed forlocal cargo owners/brokers to increase the cargo carried on South African ships to 25.1% of total port cargo throughput. Yet this policy has failed to avert the decline in the maritime fleet over the last few decades as in Table 3 above. The 2008 South African Maritime Transport Policy enshrined South African maritime coastal trade freedom to domestic and international shipping and would require revising to consider the cabotage restrictions including establishing a shipping register with incentives, crew, construction and other requirements, this report identified for other countries in chapter 2, if cabotage is to work for South Africa. However, Chasomeris considers existing legislation does not legally allow cabotage and preferential treatment by domestic companies even if stakeholders themselves wished to favour cabotage and local shipping, as with Anglo American and the 2 new South African bulk carriers. Given the preferential treatment to road haulage, South Africa’s Grindrod/Unicorn and Ocean Africa Container Lines/Safmarine have avoided investing in expanding additional coastal cargo feeder services between domestic ports such as Cape Town-Port Elizabeth to East London to Durban and beyond.

Currently, the 1998 Shipping Registration Act legally permits South African vessels to fly the country’s flag but offers no specific inducements to do so nor to formally register as part of its merchant fleet. South African supply chain stakeholders have met with government representatives since 2005 but have not found any current advantages to offset time, administration and other costs, especially if these guidelines are voluntary or without incentive. Nor can foreign vessels currently use it as a flag of convenience (Hare 2012). Additionally, under the 1983 Admiralty Jurisdiction and Regulation Act; South Africans may be potentially unable to obtain mortgage finance, as mortgage claims rank lowly in the prioritisation of judicial claims during a dispute. The South African National Department of Transport in its 2015 Strategic Plan reaffirms South Africa’s commitment to prioritise cabotage and the development of indigenous shipping/coastal trade as another means of efficaciously facilitating a maritime centred economy.

In 2016, it introduces an envisioned Cabotage Policy For Coastal, Regional and International Waters and African Maritime Transport Charter, a March 2017 Cabotage Bill and in 2018 it proposes an updated Maritime Transport Policy White Paper and Merchant Shipping Bill. It also proposes revising exchange controls, and recently through its new Income Tax Act, removing/reducing maritime related income tax, dividends tax, capital gains tax and seafarers, a cross-border withholding tax on interest and historically has provided significant depreciation allowances, especially for vessel assets. South Africa is also proposing a tonnage tax which would favour South African registered vessels who comply with the higher crew wage and maritime standard required of South African registered vessels that may currently discourage it, whilst simultaneously acquiring tax revenue from foreign vessels. The National Department Of Transport (2011) identifies future policies to reform maritime education and training, the potential development of a green ship recycling facilities, possible shipbuilding and ship repair incentives (existing capacity up to 140 metres); the establishment of a transhipment hub and port modernisation program as further areas to consider for the future of Southern African shipping. Currently inconsistent definitions relating to cabotage and a lack of a formal cabotage policy as the present state of South Africa demonstrates that until this issue is resolved, stakeholders will prefer to register in other jurisdictions which are articulated more coherently or utilise foreign owned shipping.

## 3.3: Advantages of Cabotage

Those who dream of the future of their nations as maritime powers have traditionally turned to cabotage as a formal maritime policy. This report evaluates the traditional economic, educational/vocational, legal, civic pride/psychological, strategic/political/military, social and environmental arguments in favour of cabotage and developing an indigenous fleet, legislation and policy for the future of Southern African shipping via the initiatives proposed under Operation Phakisa. Significant economic potential is envisioned from cabotage, as South Africa as Africa’s most diverse, complex and historically significant economy, one of the most prominent Southern Hemisphere economies, a BRIC partner; prominent in exporting mineral, agricultural produce, vehicles and value added/beneficiation manufactured goods yet unique among the top 35 economies of the world in never having a formal cabotage policy and without its own fleet, yet influencing up to 4% of global imports and exports. The economic advantages of cabotage are proposed by those in favour to include increased employment in trade, ship repair, shipbuilding plus economic development and activity, training and work experience, savings and investment along trade diversion and tax revenue from foreign vessels. After the UK created a tonnage tax, shipping companies elected to retain local bases and fleet registration (Department of Transport 2011). Trade diversion and trade creation will indirectly improve the national current account and net balance of payments, conserving foreign exchange, from reduced import shipping costs once established and internationally competitive.

Given South Africa’s significant $25 billion investment in Durban’s proposed second port expansion, Gauteng-Durban dry port and rail revitalisation/modernisation programme, establishing domestic shipping would ensure greater cost recovery and viability of these initiatives. With a lack of African competitors outside Nigeria, this report considers that once established, an indigenous shipping market hypothetically should be able to exploit Africa’s several thousand mile coastline and substantial hinterland to divert Africa’s over $1 trillion GDP estimated value of seaborne trade to prioritise African cargo throughput and simultaneously improving landlocked country hinterland connectivity, reducing transport, distribution and storage costs (Department of Transport 2011). Increased competitiveness with international shipping consortia might further enhance consumer and other supply chain stakeholder welfare for ourselves as Africans, rather than maritime transport and economic sovereignty determined by others –the choice will exist. Prospective firms could learn from the success of 1700 South African fishing vessels that survive. Hodgeson (2012) for Canada argued that historically an advantage of historical cabotage policy formally articulated was in encouraging local shipping firms to emerge; especially to consider overcoming market failure where international shipping firms that failed to understand local market needs. These companies increased overall economic efficiency through establishing feeder trade for Great Lakes, when incentives were provided to participate.

In introducing cabotage, South Africa could experience similar economic advantages to New Zealand (Cavana 2004) provided that stakeholder requirements are satisfied and that services become ultimately profitable and cost competitive. Brattan and Schuster (2015) attest that the US Jones Act on cabotage supported over 246,500 maritime industry related jobs (33,700 seafarers, 94,000 shipbuilding and repair, 91,000 on port services and 61,300 on water transportation) directly, even without interdependent supply chain and industry employment indirectly. Brazil has focused on other benefits including requiring local content to stimulate its manufacturing economy sector whilst Nigeria profits from reliable, secure cargo. Expanding potential seaborne trade domestically would facilitate shipping transport advantages of economies of scale. Existing companies such as Grindrod would also face less pressure from international conglomerates seeking to buy them out, and economically survive whilst certain reforms, guarantees and incentives would entice new market entrants. Local companies might experience greater transport flexibility and cost reductions through increased frequencies, reliability and efficient service delivery of services rather than relying just on road/rail alternatives reducing economic congestion costs for the hinterland. However if the economic advantages of cabotage were to be realised, South Africa’s government would either have to consider several options to ensure that new shipping companies would have the chance to succeed; including direct subsidies/protective trade measures or guaranteed cargos/ market access from the public sector; promote it actively in the commercial sector or else ensure sufficient tax incentives, legal reforms and sufficient access to funding/credit are possible where none currently exist. An example is provided by the Nigerian Cabotage Vessel Financing Fund, sourced through two percent of any contract revenue by any entity engaged in coastal trade, any tax, tariff or trade revenue.

Cabotage also has significant educational/vocational advantages to assist the future of South Africa’s destiny as a maritime power, including providing an alternative labour source of employment, skills and experience, especially a native seafarer, shipowner, ship charterer, ship repairer and maritime industry base. This would further ensure that proposed expansions in maritime education through existing and envisioned future facilities such as the South Africa Maritime School and Transport College, the 2012 opened University of KwaZulu-Natal Unit for Maritime Studies, University of the Western Cape, Durban University of technology and centre at Nelson Mandela Metropolitan. University diploma programmes at vocational high schools and FET colleges are viable –linking labour supply with economic demand. This approach was favoured by South Africa’s Transport Minister Dipuo Peters: *“The government must make sure that education and research in South Africa’s maritime sector be implemented as soon as possible and benefits our economy. It would be great to see South Africa becoming part of the 35 nations that enjoy a 95% league of the world’s trade vessels, sighted moving in and out of our waters. One of our immediate tasks is to find solutions that speak to the maintenance of those in possession of scarce skills and competencies, particularly in the maritime sector. But in order for our maritime sector to develop and eventually grow, we need to focus and invest in the necessary skills and training.”* For South Africa, the economic advantages of a local maritime fleet would ensure employment of skilled, qualified citizens rather than importing scarce skills from abroad or exporting the wasted taxpayer investments in education to shipping fleets and maritime industry opportunities abroad do not exist

One of the most significant costs inhibiting trade to any supply chain stakeholder is that of policy uncertainty by government. Cabotage policies are interpreted differently by various entities. This report proposes that a major legal advantage exists both domestically and internationally if South Africa clearly articulates its position as to whether it categorically rejects cabotage or accepts it, as nothing is formally stated in existing legislation. If cabotage is to be implemented, stakeholders would at least experience lower legal compliance, administration, time and business opportunity costs, whether they sought to become involved as domestic shipping companies to exploit advantages/minimise losses or whether they had to alter trade arrangements to ensure legal compliance. The sooner and more definite government policy makers are on any policy; the less intense the legal or business disruption cost consequences, especially if South Africa publicises its proposed legislative cabotage policies and enables affected supply chain stakeholders to participate –provide constructive feedback. Another potential cabotage policy advantage to the initiator is strategic/political not just economic. Governments can appeal to people’s sense of being civic minded –or patriotic, with a tangible symbol of their country’s economic sovereignty and freedom from domination from foreign shipping companies. If combined with a patriotic, jingoistic marketing campaign, it can extend local economic advantages. SAMSA is internationally respected with high maritime safety standards, ensuring a domestic fleet would be credibly regulated. Finally, the ultimate economic advantage for South Africa, and by extension Africa; is that there is comparatively minimal risk of reciprocity and violates no international trade laws or policies (Ruppel and Bian 2016) including the 1923 Convention on the International Regime of Maritime Ports, –since so many countries already endorse certain preferential coastal trade restrictions for domestic over international transport, especially for shipping. Therefore if efficiently articulated to satisfy stakeholder requirements and avoid failure, it may enable our continent to be internationally economically competitive with those nations who historically and continue to favour cabotage.

Those who favour cabotage cite not only its capacity to magnify economic sovereignty but also military power, in providing a strategic reserve of trained auxiliary seafaring crew and vessels that could potentially be requisitioned for warfare, piracy/anti-poaching operations or emergencies including strikes, natural disasters, civic unrest/insurrection or humanitarian crises to enhance limited navy capacity. South Africa’s Navy ever since Britain’s Royal Navy relinquished the Simonstown Naval base and defensive capacity in 1957, has been traditionally been the most under-prioritised, under-funded, least significant of all South African forces, whilst the Coastguard also has limited capacity, despite Africa’s secondmost significant coastline after Somalia and the strategic location of the Cape. Nor have other African nations favoured their navy or merchant marines. It is considered far cheaper and quicker to temporarily requisite and convert existing vessels and support domestic shipyard capacity than maintaining a large peacetime navy or rely upon uncertain foreign alliances/ importing vessels from abroad, as the United States have considered when retaining the Jones Act.

International maritime law does not currently have a policy as to whether foreign flags of convenience registered vessels, exempt vessels from being confiscated by governments during war or emergencies (even if those vessels were to be compensated), which would not apply if a condition of entering the South African merchant shipping register. Brattan and Schuster (2015) for the United States argues that an extended indigenous, merchant marine, can deter foreign nations both economically and militarily if the potential reserve capacity exists, as it does for China’s actions in usurping the South China Seas. It provides fiscal incentives or subsidies to local registered vessels under its Maritime Security Programme of 60 potential naval vessels and 100 auxiliary logistics vessels partially offsetting significant costs. Without a domestic fleet, both South Africa and Africa’s islands, significant coastlines and exclusive economic zones cannot have physical sovereignty enforced if necessary, especially amidst future uncertainty of global climate change, political extremists and other potential risks. Economically, politically and militarily, China, Korea and Japan have succeeded in providing a commercially viable merchant marine for their nation’s trade, where the USA has failed to reduce its decline as a maritime nation. The greater the number of foreign vessels, the more economic control passes to other nations, reducing foreign policy control and enhancing our continent’s exposure to foreign shocks such as the 2009 financial recession, especially as seaborne trade constitutes over 90% of the total global volume.

Table IV: Comparative Transport Geographical Distances For Cargo

|  |  |  |  |
| --- | --- | --- | --- |
| **Transport Routes** | **Ocean (km)** | **Road (km)** | **Rail (km)** |
| Cape Town-Durban | 1474 | 1660 | 2106 |
| Cape Town to Port Elizabeth | 787 | 756 | 1068 |
| Cape Town to East London | 1006 | 1042 | 1412 |
| Port Elizabeth to East London | 250 | 300 | 740 |
| Port Elizabeth to Durban | 719 | 927 | 1606 |
| Durban to East London | 469 | 667 | 1519 |

(South Africa Department of Transport, 2011)

For a nation as dependent as South Africa on road haulage for domestic trade, significant social, environmental and economic advantages exist in following the European (Ng, Sauri and Turro 2013), Brazilian and Australian (Everett and Kittel 2010)desire to favour cabotage and short sea shipping as a potentially viable solution to the noise, accident, congestion, emissions, pollution and other externality costs of increasing urbanisation and economic development enhancing pressure to rely on overloaded, poorly driven truck transport. Brooks M and Frost (2004) consider for Canadian cabotage, although historically unsuccessful, interest is being revived as a means of reducing land traffic congestion issues and greenhouse gas emissions Until South Africa and Africa reinvests in its rail as an intermodal transport alternative, the economies of scale, port modernisation programmes and other advantages of short sea shipping could eventually ensure the commercial survival of a market demanded number of vessels and maritime industry enterprises. Geographically, vessel distances are slightly shorter than road and rail alternatives. In Europe, transport is considered the second largest greenhouse gas emissions source, of which road contributes substantially more than shipping. South Africa through prioritising shipping might be able to more efficaciously implement its obligations under the Kyoto Protocol and successors.

Chang *et al.* (2007) have even reviewed and proposed successful short sea shipping models that improve port efficiency and security while reducing congestion, fuel costs and pollution. For example each single 10,000 TEU vessel, displaces approximately 10,000 trucks from South Africa’s roads, reducing associated externality costs including significant traffic accidents, road maintenance costs and business/time congestion delay and opportunity costs which restrict the rest of the South African economy. It reduces potential resources to invest in additional road/rail infrastructure which frees up valuable land pressure around cities. It also reduces fuel and transport costs from economies of scale for utilised, optimised vessels. Port congestion may also be reduced. Norton (1996) affirms that existing feeder services enable Cape Town to utilise KwaZulu-Natal sugar not importing it from abroad if reliant on trucks on poor Eastern Cape connecting roads. Significant possible health advantages also exist from the noise, air pollution and reduced mental/psychological stress or physical probability of fewer accidents of inestimable future value to African nations who consider cabotage and a maritime fleet alternative to road transport.

## 3.4: Disadvantages of Cabotage

Since South Africa has historically succeeded without a formalised cabotage policy in its commitment to free maritime trade without restrictions, a history of failed nationalised and indigenous projects/ enterprises exists in Africa and elsewhere; along with considering that it is not universally adopted/failed for various countries, this report section outlines certain perceived disadvantages of cabotage for the future of South Africa and African shipping. To accurately determine this, it recommends that policy makers and supply chain stakeholders potentially affected consider historical case study examples to avoid costly failures and other potential economic, environmental, legal, bureaucratic, education and training, and political/military arguments against introducing the unknown policy of cabotage. Economically, cabotage policies that have aimed to develop a commercially viable national fleet through granting a domestic monopoly on coastal trade have been considered as restrictions of the freedom of international firms to trade. Without a permit waiver system or alternative provision for internationally owned vessels, there is significant economic danger in establishing market failure, if local firm supply cannot adequately service supply chain stakeholder market demand. Additionally, despite potential advantages, supply chain stakeholders are essentially conservative –preferring to rely on trucks until it can satisfy stakeholder requirements more cost competitively and sustainably than air/road/rail substitutes. If a tonnage tax is to be implemented it would have to encourage existing maritime industry companies to invest and expand operations domestically; it would have to encourage new participants and perhaps promote the transfer of foreign registered companies to a South African flag of registry. With significant competition in Australia, New Zealand, South America and Asia, the potential to attract foreign investors to a local register may be constrained.

A domestically operated monopoly of coastal vessels may establish higher freight rates, trade and transaction costs, poorer service and other net opportunity costs/deadweight loss to consumer, transport provider and other domestic supply chain, stakeholder welfare, if lacking foreign registered vessels as economically competitive. Beason et al. (2015) identified that retaining the US Jones Act would produce a net economic welfare benefit of $2.8 billion at 1995 level prices, that cabotage service price would decline by 5-12% and domestic revenue would decline by (2.5-6.8%). In Chile 23 different companies participate in international trade over greater distances with lower freight rates than 5 domestic companies. Internationally registered vessels of different countries need to be cost-competitive to remain in business. Cavana (2004) for New Zealand also identifies potentially higher freight rates, lower export volumes, significant losses from perishable cargo and reduced market competitive choice from introducing cabotage. In Nigeria an absence of credit and financial support to fully implement the Cabotage Vessel Financing Fund to indigenous companies, inhibited prospective entrepreneurs outside a government guaranteed petroleum and gas cargo market. Therefore, cabotage can only avoid economic disadvantages if it retains market efficiency, productivity and competitiveness, being cheaper than to import or use transit/transhipment cargo for equivalent traded goods, avoiding the formation of a potential oligopoly that reducers supply chain stakeholder welfare.

Additionally, to construct or charter a fleet requires significant sunk costs, high initial fixed and continuous operating costs including crew wages and benefits, stores, port dues, fuel, maintenance, insurance and repairs along with either construction, conversion or time, voyage and spot charter costs, to be economically competitive. Potential new market entrants will be initially reluctant to participate without securing access to sufficient maritime financing, insurance and mortgage credit. Hare (2012) proposes that promoting vessel ownership rather than registration provides new entrepreneurs with additional security as potential collateral for a default. After 13 years Nigerian vessels, despite subsidies and other legal advantages, still are not internationally competitive. As domestic coastal shipping has been marginalised, supply chain networks, infrastructure, information, communication, planning and risk management would need to be considered. Maritime transport cannot physically eradicate the requirement for road/rail services more able to offer a closer door-to door service. A proposed domestic shipping fleet may reduce nationwide road congestion but increase port and interconnected intermodal transport connections and associated disruption costs. Additionally, South African ports are economically among the most expensive in the world. As covered in Dyer (2015), high annual Durban Container Terminal handling charges for a Supermax vessel of $250,000 compared to international competitor averages of $150,332 illustrates this further illustrates how expensive Durban’s inefficient port is at $275,000 for a Panamax vessel’s average annual port costs, compared to a world average of $62,415 for rivals Therefore, cabotage could potentially increase export costs, through higher local transport costs and reduce associated employment, discouraging trade.

Although cabotage is perceived as more environmentally sustainable and cheaper than alternative road and air transport haulage, it too possesses significant environmental disadvantages to coastal and port areas, even if reducing hinterland environmental pressures including greenhouse gas emissions (especially nitrogen and sulphur oxide), marine pollution, noise, light and possible disturbance of local ecosystems. These will occur, affecting public health, biodiversity and other threats unless South Africa considers enforcing sufficient legislation to protect coastal ecosystems, marine areas and emissions as in North America and Europe. South Africa however could seek to offset these potential disadvantages by financially penalising polluting vessels and maritime transport operations that adversely affect local ports, coastlines and oceans; through extending marine reserves, by restricting/reserving certain maritime routes; by involving potentially affected stakeholder consultation, by prescribing specific environmental standards for any coastal trading vessel whether registered, chartered or constructed/demolished/repaired. However, it could provide tax incentives, research and development subsidies and other inducements to renewable energy and hybrid powered vessels or liquefied natural gas alternatives, as certain ports of the future are seeking to endorse (European Community Shipowners Association 2016) as the European Union did in limiting sulphur in fuel to 1.5%.

Perhaps one of the most significant disadvantages of enacting cabotage includes the legal-bureaucratic challenges that such a policy would create for South Africa. Significant administration, labour, technology, enforcement, judicial court, time and regulatory compliance costs would exist, given the fact that South Africa has never experienced such a policy and is judicially inexperienced –to succeed any existing potential legislation and policies would have to be revised so that freedom of navigation, trade, customs, security, the environment; education; defence, foreign affairs and supply chain stakeholder requirements are not adversely affected nor are contradicted, in addition to supporting it. For example after 22 years since first proposed, the South African 1983 Admiralty Jurisdiction and Regulation Act still prohibits domestic vessel mortgage registration. Whilst SAMSA is known for its high standards; if it is to enforce something as comprehensive as cabotage; it would considerably more resources deployed to it. SARS, Customs and the South African Admiralty and Supreme Court of Appeal would have to receive appropriate training and modify legislation –especially if different countries have different cabotage policies and fleets differ in flags of registry. For example, public policy procurement whilst favouring South African (especially BEE) firms, it completely ignores South African shipping for preferential treatment. There is no formal local content requirement either for vessels or for a local maritime industry, to patronise local firms. Any African country proposing cabotage would need to minimise all bureaucratic procedures/ costs that could impair seaborne trade –if that country was to follow Nigeria’s policy in allowing a waiver permit system that companies could automatically apply for if local companies were unable to satisfy market demand with market supply. Stakeholders already experience limited time and other scarce resources. Cabotage trade restrictions may further reduce competitiveness unless it can be electronically submitted in advance perhaps with an Automatic Identification System to prove vessels are domestic or international as proposed in Europe, to minimise manual resources.

Additionally, Brooks and Frost (2004) for Canada and Agoha (2008) for Nigeria, consider that establishing significant local standards –environmental, health/safety etc possesses the potential legal disadvantage of discouraging local companies to register, if legal definitions contradict or these standards are higher than equivalent international legislation, especially if these potential entrants already face initially high sunk and operating costs. For example oil rigs were discouraged (Department of Transport 2011) requiring crew to possess visas despite not entering land –now exempt as an oil refinery. Although it may readdress historical issues of social and economic inequity; if South Africa were to align cabotage and domestic shipping companies/maritime industries on black economic empowerment affirmative action rather than a merit and qualification based recruitment system; potential entrants may be further discouraged at the legal policy involved. Nigeria required a minimum of 15% indigenous owned to qualify for cabotage state funding. Locally registered companies would constitutionally not be allowed to enquire/ \discriminate on the basis of one’s HIV AIDS status –the uncertainty implications in recruiting local seafarers and other staff may discourage investment further as disadvantages. In Australia Webb (2004) and Berg and Lane (2013) argue against local labour standards which establish higher crew costs as binding union agreements –raising domestic shipping costs further in contrast to internationally competitive shipping nations which recruit for lower wages and benefits. International incoterms further penalise South Africa legally, where contracts of carriages for goods are based mostly on cost, insurance, freight (C.I.F.) favouring international rather than domestic shipping that would need renegotiating.

Those in favour of Operation Phakisa and an African maritime economy need to consider potential education/skills/ training and vocational argument against cabotage and a local series of shipping companies and maritime industry. Currently South Africa produces few professional seafarers –and wields a scarcity of maritime education related skills; establishing significant labour supply constraints. When compared to seafarers in India, China, Korea, Vietnam and the Philippines for example, South Africa experiences significantly, historically higher labour costs. South Africa’s labour market is known for its strike actions and militancy, especially in other economic sectors such as mining, teaching and agriculture; which might further discourage new prospective entrepreneurs, fearing labour security as well as cost. Akpobolekemi (2012) noted a shortage of seafaring training skills to satisfy Nigerian cabotage requirements (section 2.1) provided insufficient vessels and shipyards to labour market demand. Nigeria has already altered its 100% domestic vessel building requirements for local shipyards to only compulsory for those 5000 GRT or less. South Africa and Africa have few maritime institutes or training facilities; no dedicated scholarships, loans or bursaries yet high course costs; very few specialised maritime academics conducting research; limited maritime technological expertise –for example no maritime engineering, few maritime lawyers, surveyors and handful of professional maritime economists throughout the continent as well as certain limitations in maritime education curriculums without local training manuals/textbooks and specialised equipment access. As Nigeria have found with their Seafarer’s Development Programme; even if training is accelerated –there are very few vessels or companies upon which locals gain acquire the necessary practical expertise. South Africa’s Department of Transport (2011), identified an 18 month course requirement and rigorous accreditation bureaucratic processes discouraged existing companies to train domestic seafarers and shore staff or institutions to provide maritime related course lecturers and workshops.

Finally; this report considers potential strategic-political-military disadvantages to initiating cabotage to defend Southern African and African territorial sovereignty, unless allocated sufficient enforcement capacity. Significant Horn of Africa piracy around Somalia threatens any potential resurgent shipping. Aside from this, the question remains as to whether South Africa conceivably would necessitate an expansive auxiliary merchant fleet, enjoying excellent relations with many African and other nations, with an impressive historical record of diplomacy; one of Africa’s leading army and navy air powers and one of only 2 African nations with nuclear capability among other advantages. Who are South Africa’s potential economic/diplomatic adversaries? Would cabotage assist? Unlike many other countries which face significant potential threats that might conceptually require a local fleet, even religious extremists are unlikely to affect South Africa substantially within the recent future but proposes a risk assessment prior to creating such a significant legal policy change. There is a question as to whether we as Africans with significant other development challenges could afford to allocate high subsidies to a local fleet, shipyards and industries, with high opportunity costs for limited taxpayer revenue. The ultimate disadvantage includes the uncertain risk of protectionism and reciprocity to consider as a credible threat –if South Africa were to introduce cabotage, how could this affect both existing and future trade/international relations? Yet existing policies have ultimately failed to create viable cabotage in Africa –the UN Liner Code advocates 40% trade reserved for importing country, 40% for exporting and 20% for others but Africa fails this simple indicator of domestic shipping sovereignty and this report cautions about implementing a policy without examining and learning from past and current failures.

## 3.5: Risks

If South Africa is to consider implementing cabotage and a domestic fleet as the future of its maritime based economy in Operation Phakisa, this report forecasts significant risks that could potentially influence its comparative success or failure as a policy that need to be managed. The most significant factors that will influence whether or not cabotage will succeed in producing the previous mentioned advantages or avoiding disadvantages; is economic… based on potential uncertainty of stakeholder reactions from producers to ports and intermodal transport to retailer and consumer. As previously stated; if it is to succeed; a domestic, coastal shipping fleet/company and any related maritime industry firm that emerges; will need to satisfy potential market demand and Chapter 2 identified stakeholder requirements; primarily through providing sufficient supply; swiftly, efficiently; cost-competitively and environmentally sustainable/ cost recoverable ultimately; even if initially requiring financial and other assistance. Internationally; the most significant risk is the future of maritime commerce and the cost of failure, with significant opportunity and other costs for supply chains, if cargo fails to be delivered/ processed and the implications for the South African/African economy. One of the greatest potential disadvantages economically include that existing international shipping companies may retaliate, to refuse/restrict trade or artificially lower freight rates to bankrupt pioneering enterprises, as with the South African/ UK/US air transport industries once opened to domestic competition. Domestically, supply chain stakeholders may refuse patronage. Additionally, whilst cabotage may develop and succeed, this report considers a significant risk may exist to establish trade diversion at the expense of the economic activity of local road haulage as an alternative opportunity cost.

External economic risks include the volatility of shipping, in building, financing, legislative and commodity trade cycles which would increase the need to base Southern African shipping on African cargos with access to African maritime shipyards, seafarers, equipment; cargo, technology, environmental, health and safety standards, to reduce dependence and uncertainty from non-African cargo, to be viable and internationally/ domestically competitive. Over 90% of global ship repair and construction capacity is located in China, Korea and Japan (South Africa Department Of Transport 2011). Additionally, Any African company/vessel would experience the risk of significant potential foreign competition and experience; with historically low freight rates based on an oversupply capacity of significant vessels, especially outside the continent. (Navarro 2013 Philippines). Africa possesses considerable risk in commissioning domestically constructed patrol boats, tugs, ferries, fishing boats, yachts and catamarans/ recreational craft, tugs, research and navy vessels, bunker barges and FSPO’s which may be difficult to sell, scrap or charter out if cabotage fails. For example whilst India constructed 33 vessels in 13 yards and Brazil 35 vessels in 6 yards, South Africa only managed 5 in 3 yards. (Department of Transport 2011). Other potential risks include a lack of dedicated research and information –even a lack of accurate coastal shipping information, business plans and case studies upon which African academics, companies and policy stakeholder can learn from to mitigate potential uncertainty. South Africa’s ship repair/rig, port and intermodal transport operations/physical infrastructure are not currently designed to favour or prioritise domestic coastal shipping or are obsolete, with already significant congestion and demand to supply chains, which presents an uncertainty risk for stakeholders.

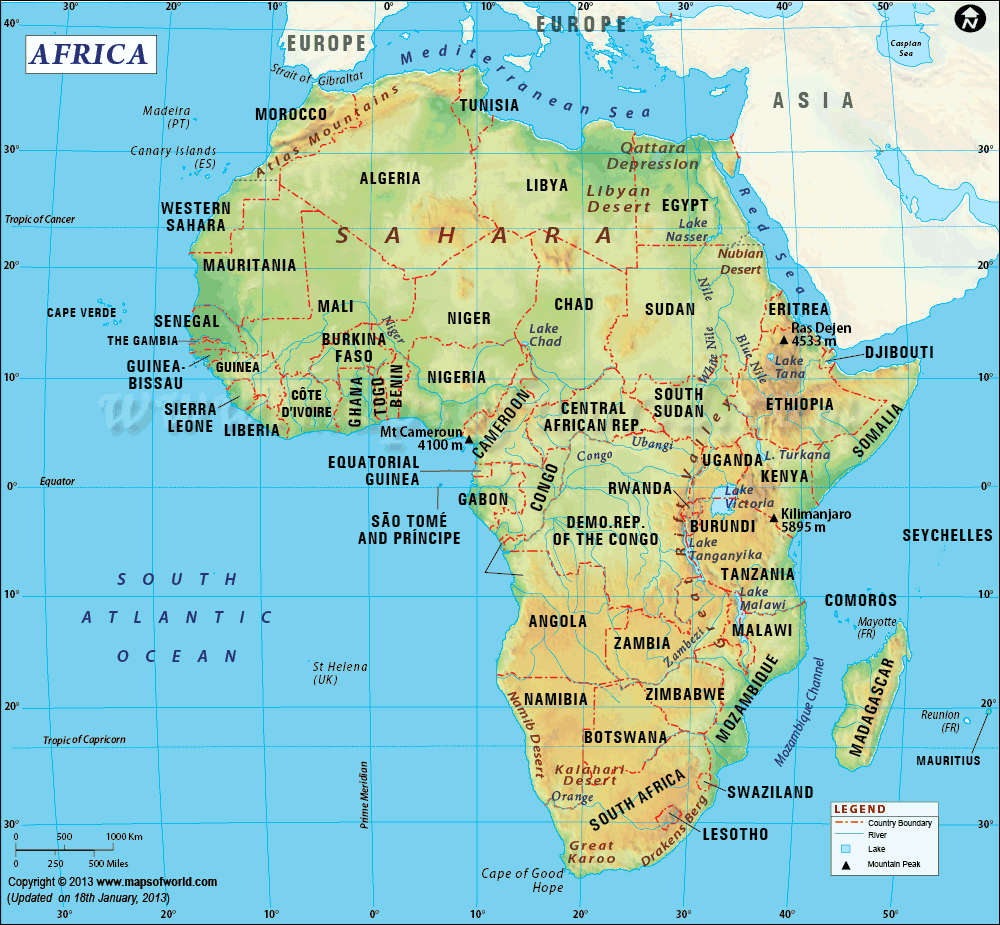
Globally; risks that potentially affect the uncertainty of cabotage aside from foreign relations include potential climate change and the hazards of South Africa’s coastline/Namibia’s Skeleton Coast, where storms, sea level rise, floods, wind velocity, currents and wave energy are expected to significantly influence the future resilience and capacity for both vessels and integrated supply chain infrastructure.

Significant risks exist for maritime finance and chartering options –existing firms are likely to be biased in favour of Grindrod and Safmarine or foreign companies, rather than local, inexperienced vessels/operations further challenging new entrants. Currently it is unknown as to whether stakeholders themselves are interested in this primarily government initiated proposal –yet their consultation and involvement is pivotal if it is to be efficacious. Whilst global seaborne trade has outgrown GDP growth; on average 4-5% since 1990; another potential financial crisis could occur. The risk of a local shipping register; is what can South Africa or any African nation do to distinguish itself from other international competitors seeking the same. Other uncertain risks specific to Africa include the unknown implications of port modernisation projects including Durban’s $7.5 billion second proposed port and whether sufficient volumes of coastal trade will justify the significant resources possibly devoted to establishing, coordinating, retaining and enforcing a cabotage policy. Ruppel and Bian (2016) further identify significant risks of low African continental trade and indigenous multi-country trading networks, the majority of which remain South African owned, to provide support and historical African issues of uncoordinated customs, trade and legal systems; problems of port and transport infrastructure, uncertain governance, politics, society, economies and other constraints to potentially establishing a viable African based network of shipping and other maritime related industry companies. This report therefore identifies that perhaps the most significant risk to cabotage is reputational: Given Africa’s past and its developmental challenges; it is expected to fail… supply chain stakeholders, academics, governments and investors internationally are highly likely to remain sceptical towards our own attempts at asserting maritime economic, educational, political, legal, environmental, safety and military sovereignty, aside from seeking to protect their own historic cabotage interests. If there is any chance, our continent/nation will need to consider whether any potential risks can be managed and resolved, primarily targeting our own continent through the following section opportunities not relying on outside.

## 3.6: Opportunities

Although developing cabotage in South Africa presents certain risks; the South African government and other key supply chain participants are committed to invest in a number of potential project opportunities which offers certain prospects to those interested in establishing local coastal trade, a local fleet, local shipyards, local crew, tax advantages etc presented as part of Operation Phakisa and the future of South Africa as a maritime economic power. Ruppel and Bian (2016) propose training 3600 seafarers over 5 years; promoting investment and increased maintenance in existing port and supply chain infrastructure to assist cabotage; incentives to encourage local vessel registration including (Initiative 18A: Support South Africa’s local flag fleet).and a local preferential procurement policy for maritime transport. Transnet ordered 6 new locally constructed, tug boats at R1.4 billion. The navy ordered 6 new coastal patrol craft (R6.6 billion) and Armscor a hydrographic vessel. South Africa is reinvesting over R300 billion to enhance its ports’ potential and R5.2 million in ascertaining the feasibility of its port procurement problem (October 2015). Local vessel construction and procurement/ charter therefore provides economic opportunities to initiate the development of local maritime industry whilst equally ensuring the survival of existing shipyards, suppliers, seafarers and training facilities.

Figure III: The African Continent Island



Source: www.mapoftheworld.com. Viewed 12 June 2016.

As the second largest continent and only permanently inhabited Earth continent without its own sizable shipping fleet, those in favour of cabotage consider that there is significant economic potential in exploiting our over 32000 square kilometre coastline through both trade creation and trade diversion. Given South Africa’s economic advantages; it can exploit its major Cape geographic shipping route, 2758 kilometre uncongested coastline and strong SADCC African hinterland connections to present ocean transport alternatives utilising local firms. This report considers that South African/African mineral and petroleum/liquified gas corporations/state companies (i.e. Angolan oil, Zambian copper and Botswanan/Namibian diamonds) could export freight in African dry and wet bulk carriers as with Anglo American’s pioneering attempt in iron ore. South African wine, vehicles and fruit, Kenyan flowers could receive African reefer cargo vessels. South African vehicles, textiles, defensive weaponry and other leading exports could receive their own dedicated general cargo, bulk or container vessels. If Anglo American, de-Beers, Rembrant, Naspers, South African Breweries, and major South African retailers including Mr Price, Pep, Ackermans, Woolworths and other corporations along with parastatals including Sasol, Denel , Sappi and Mondi could support local cargo rather than foreign firms and still retain profits/recover costs; then both domestic industry and local shipping would contribute significantly and survive.

African seafarers could be trained in Africa’s three exisiting maritime university nations –at Egypt’s Arab Academy of Transport, the Ghana Regional Maritime University or any of South Africa’s existing and proposed maritime education facilities rather than relying on abroad. African maritime lawyers and surveyors could train from these facilities, gaining experience through our internationally competivie reputation in Admiralty Courts, SAMSA and the Maritime Law Assocation of South africa., whilst Transnet specialities in local tugs, pilots and patrol craft could be exported to other African nations rather than them importing these scarce skills from abroad. Hare (2012) considers that a domestic fleet and shipping companies would increase employment for naval architects, marine engineers, seafarers, painters, electricians, turners, fitters, educators, welders, boilermakers, riggers, instrument makers, security, administation, planning, crane drivers, repairers, technicians, accoutants, surveyors and others. South Africa potentially could learn from Liberia –though promoting shipping register incentives. Its banking corporations ABSA,Nedbank, Standard Bank and First National Bank along with Grindrod could offer maritime finance and Samlam/Old Mutual and Liberty could offer maritime insurance and charterparties to further support African maritime trade. South Africa could extensively renovate its World War 2 era shipyards to capitalise on ship repair opportunities, (although there are certain environmental and safety externnality costs to consider). This report therefore identifies multiple potential opportunities towards the Operation Phakisa target of an aditional over $18 billion GDP and possible 1000,000 jobs by 2033 with greater potential control over shipping costs, standards; externality emissions reductions and other benefits through implemeting a cabotage policy for the future of South Africa

Of the over 15,000 vessels that annually enter South African ports, this report argues that considerably more economic activity would be supported by local vessels more inclined to patronise local suppliers, local repair yards, local crews, local insurance, local cargo needs for marginal callers and local tax revenue where profits are not repatriated to the same extent by foreign companies lacking the same patriotism. Provided stakeholder requirements are met; trade diversion from foreign to domestic companies can only provide considerable economic benefits to African local firms. South Africa will always have the Cape route to capitalise on vessels incapable of the Suez and Panama Canals such as 240,000 proposed ton ‘Cape size’ vessels –even the global record 400,000 Brazilian ‘Vale.’ This report considers that without a maritime fleet, Africa cannot take the economic initiative of determining its own imports, exports, markets, trade, balance of revenue, foreign exchange and security, always dependent upon others. It remains internationally uncompetitive whilst other foreign countries continue to espouse claims of trade liberalisation but hypocritically retain their own protectionist policies to incentivise domestic shipping. South African shipping companies have historically worked –Provided they concentrate on African, Southern Hemisphere and BRICS coastal trade rather than other overcrowded markets, this report considers significant possibilities just from shipping current cargo but in local vessels. Although South Africa itself currently lacks its own fleet, Grindrod and Safmarine affirm that even if integrated under other companies and flags of registry, local shipping/logistics country are capable of prospering. If cabotage works with South African coastal trade, it could expand into African coastal trade or even part of the 300,000 km of inland waterway –which is navigable –especially more along the Nile, the Congo, the Chobe and other significant rivers or across Africa’s lakes. Shipping could considerably speed up significant land-based congestion at roads, railways, dry ports and boarders/customs, through diversion to ports.

The Indian Ocean Commission (2013 proposes the facilitation of economic development through promoting a regional shipping service –African initiated, owned and operated for agricultural commodity trade creation between Comoros, Reunion, Madagascar, Mauritius and the Seychelles, in the absence of externally flagged fleets given that international shipping companies have failed. This report considers it potentially feasible to enhance mutual trade benefits provided that South African exports can be complemented by local produce such as Comoros vanilla, Madagascar rum, Zanzibar spices, Mauritian sugar and other commodities if integrated with existing trade routes, port networks, intermodal transport connections which could also be traded beyond Africa. Seven shipping companies, (CGM\_CMA, Evergreen, MSL-MZK, MSC etc. all of which are foreign owned and registered even Safmarine under Maersk), currently survive on this route, which Africa does not profit from its own commodities to the same extent as if an indigenous competitor provided a substitute. The prospects for African trade are higher than global average GDP growth over the next few decades but land-based cargo presents significant congestion, bureaucracy, externality and other opportunity costs. Although proposed as a future research area by this maritime economist; this report notices a feeder service could be extended to African owned/ chartered/operated cruise tourism/vessels to promote maritime tourism.

To implement cabotage; local shipping firms both established and newly registered companies could potentially profit from the R 300 billion upgraded port infrastructure development programme and preferential cargo treatment in a revised Mineral and Petroleum Resources Development Act. Nominating South African vessels for South African cargo might be aided through the discovery of gas of South Africa’s east coast; the development of sustainable aquaculture and the need to modernise the country’s existing fishing fleet in addition to primary commodities, value added and manufactured goods, just as equally could be transported in a locally operated/constructed/chartered vessel once established. Customs tariffs could be reduced on exports of vessels, maritime equipment and supplies along with tax incentives for critical imports that cannot be locally produced. Existing fisheries and other seafarers could receive improved training support so that our labour market and vessels are both domestically and internationally competitive. Another previously identified growth area might be for shipyards to construct and export environmentally sustainable/renewable solar, wind and hybrid electric powered recreational vessels including catamarans and yachts and with state/private sector support in research/marketing/ technology, training/ fiscal and legal incentives to more affluent or sports minded Africans as a consumer class. This report envisions that cabotage could establish significant opportunities for South Africa’s maritime economy if it concentrates on these areas for which it might potentially have a comparative advantage, given its previous economic entrepreneurial and maritime history.

For these opportunities to succeed, the South African government might need to consider legal protection against foreign competitors, through initially supporting infant industries through the above mechanisms i.e. preferential cargo, port tariff discounts and others. Each domestic shipping company/registered vessel will take time to recover costs and survive independently. However, to avoid other African failures, any funding support would need to be repayable within a set time period –preferably no more than 5 years maximum for the initial payment, even if set at a nominal inflation indexed interest rate. South African vessels are already legally permitted to offset vessel depreciation. Berg and Lane (2012) consider that Australian vessels are able to claim partial tax deductions for employing local seafarers, provided they are paid at national law wages to offset higher than international market labour and benefits costs yet vessels also have to be above 500 gross registered tonnes to qualify for concessions. Companies are responsible for employing at least one rating, engineer and officer under the Australian system and for providing vessel access and training to seafarer citizens requiring maritime experience. SAQA could add a maritime website for careers advice however, whilst increased maritime career awareness would facilitate a sufficient supply of recruits.

The government could also reassure the maritime industry that provided standards and labour laws are respected; they will aid arbitration among labour union disputes to follow the successful Germany based laws and reduce potential uncertainty (as might have avoided the Marikana tragedy). The state could also consult Grindrod/any other existing companies to find out why they are not registered under the South African flag and what might be potentially necessary to convert.

South African companies could form partnerships with Nigeria, along with its maritime training facilities, governments, customs and tax as the main example of existing African cabotage to learn from their experience and share past experience/current investment to maritime training and vessel construction/ maritime law and standards expertise. Eventually South Africa and Africa could form joint business shipping partnerships, to enable other nations to benefit from maritime fleets, seafarers, research, maintenance expertise, technology and industry, including sharing berth costs at expensive ports and arranging intermodal cargo cooperation, joint information, marketing and administration sharing costs as with international shipping consortia. Vessels could receive dedicated berths. However, nationalised shipping companies are not advisable based on previous historical examples of political interference superseding meritocracy in qualifications and business base, profit maximising, environmentally sustainable, cost recoverable vessel operations. A company operating under cabotage would have to be corporatized (i.e. Transnet) or aligned to private investment, not dependent on perpetual subsidies and satisfy all local country labour, insurance and other laws. Initially vessels could be chartered so local seafarers and companies gain experience with less risk exposure prior to significant investments in locally converted or constructed vessels. In answer, the South African government has proposed to reserve 40% of mineral cargo to locally flagged vessels, to research and formulate a cabotage policy to reduce uncertainty and reserve coastal and transhipment shipping for these companies; to include a maritime finance division in the newly formed BRICS bank, to revise taxation laws and provide a capable, effective and cost efficient maritime administration, education base and standards regulator (SAMSA). Yet the private sector still needs to support an African fleet to justify the potential future of cabotage through these opportunities.

## CHAPTER 4: THE FUTURE? INTERIM CONCLUSIONS

## 4.1: How to Ensure Successful Cabotage

In conclusion, this report considers that there are many factors to evaluate in ensuring that South Africa develops a successful cabotage policy if it is to represent the future of Southern African and African shipping. It would need to learn from historic and present case studies of successful cabotage whilst seeking to minimise the conditions and factors which caused it to fail globally and where South Africa’s maritime fleet historically declined once opened up to globalisation and highly subsidised competition. This report identified a number of economic, environmental, legal/bureaucratic, vocational-educational; strategic-military; social and political arguments in favour and against cabotage that need to be considered in establishing a domestic cabotage legal policy; shipping register, seafarers and education; maritime fleet, financing, shipping yards; industry and companies as essential components of a reserved coastal trade policy. This report considers that most significantly, stakeholder requirements must be satisfied including speed, punctuality; security and safety. Cabotage needs to be commercially viable, satisfy cost recovery, economies of scale and cost competitiveness where supply of vessels, cargo and crew are compatible with demand, minimising emissions, congestions and other trade externalities compared to intermodal transport –facilitate trade promotion, adhere to SAMSA standards and international/national laws whilst avoiding anti-competitive behaviour/ predatory pricing. It requires successful integration with existing supply chains, ports and intermodal transport operations, receiving preferential cargo, procurement and other treatment to road haulage alternatives, where feasible.

Existing supply chain stakeholders, professional associations, major corporations, government parastatals, SAMSA, customs, SARS, ports, the local community and maritime education sector all need to be consulted to ensure that cabotage can satisfy as many South African/African interests as possible. However; whilst receiving priority treatment, this report recommends that governments seeking to endorse African cabotage should favour incentives rather than legal restrictions that might ban existing trade operations of established international shipping companies; as the opportunity cost of trade failure could dramatically paralyse or raise the costs of existing commerce; if foreign vessels cannot carry coastal cargo where no domestic carrier is available. This report identifies the need to continuously review successes against failure, modifying, updating and intervening cabotage policy and any legislation/economic/environmental and other outcomes as necessary in response to any unforeseen externality costs, emergent risks or opportunities. It cautions the need to manage possible risks including the uncertainty of global shipping and economic activity; vessel and shipyard oversupply; the current existing scarcity of maritime finance; any changes in maritime/cabotage related legislation –both allies and competitor nations; any projected increase in hazards through South Africa/Africa’s climate/climate change related risks; environment or coastline; piracy, social-political-environmental instability, epidemic or war as potentially envisioned risks. Perhaps South Africa/Africa could reciprocate as the most equitable and efficient method applying cabotage policy as selectively as those who have for decades profited themselves with their own direct/indirect support at South Africa’s/ Africa’s liberalised trade expense.

This report also identifies that local stakeholders including corporations, the legal, tax and customs systems, ports and governments will need to cooperate and support each other through information sharing, finance, technical support, patronage, marketing, administration etc. at the expense of foreign companies to favour patriotism rather than nationalisation. South Africa could promote it as ‘Proudly South African/Proudly African,’ to follow the ‘Fly America ‘policy to gain business and popular support, promoting local crew/companies first whilst guaranteeing cargo for government trade, especially favouring Black Economic Empowerment companies where socially possible to reduce historic concerns of social justice –but choosing any economically competitive South African/African firm when not available. Competitive opportunities such as those identified in section 3.6 for Africa, BRICS and the Southern Hemisphere including seafarers, recreational vessels, tugs, patrol, fishing, cruise vessels and all cargo types, will need to be exploited. Unlike Australia and many Western nations that have under-prioritised maritime education; our labour force will be young, with the chance to gain modern experience, satisfying local requirements, understanding local businesses and laws.

The African Maritime Charter commences by **‘***recognising the role of maritime transport in the facilitation and development of trade between Africa and the rest of the world as well as the need to implement an effective maritime transport policy with a view to promoting intra African trade’****.*** Under Article 13.1: **‘***In promoting Cooperation among African Shipping Lines, the Charter encourages adoption of national policies, regulations and programs that attract public and private investment in ships and shipping in general.’*The future of Africa will be determined by its shipping. This report envisions an African maritime future with a South African maritime fleet as alternatives to the complete domination of our seaports, the Cape of Good Hope, the Atlantic and Indian Oceans by non-African interests. Why should foreign crews, foreign shipping companies and fleets, foreign maritime finance and insurance; foreign cargoes, standards, support and legislation influence our maritime future without even a single competitive local firm as a choice? Why should we succeed in other areas but there not be African shipyards, cruise vessels, container ships, oil rig platforms, survey vessels, patrol, tugs and pilot boats, research vessels, reefer, dry, wet and neo-bulk cargo, general cargo, dredgers, warships, yachts, catamarans and other recreational vessels? How can maritime sovereignty be real unless we as Africans are able to compete domestically and internationally in our shipping, as with the other 5 permanently inhabited continents on Earth? Is it really pragmatic to retain a foreign monopoly over domestic coastal trade? Can security, environmental and maritime safety laws really be assured without any local companies involved or without specific defined policies? With increased African cargo and fishing vessels, governments could provide inducements as auxiliary vessels designed to report/ deal with any potential poachers, smugglers or pirates to enhance maritime security, penalising Chinese/ Japanese trawlers for example if a cabotage policy formally existed and was enforced. If South Africa is to succeed in its vision for a maritime economy, it will need to incentivise the private sector and parastatals to support patriotism whilst ensuring it is profitable and sustainable. This report concludes by advising stakeholders to at least consider our historic lack of policy, local fleet and maritime economy and to investigate whether or not it represents our nation’s and continent’s future?

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