PART 4: PROPOSALS AND RECOMMENDATIONS

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4.1 Introduction

In this section of Part 4, conclusions concerning the topics dealt with in Parts 1 to 3 are discussed and policies and public measures intended to promote economic development in the maritime transport and related industries are proposed.

In contrast to shipbuilding, ship repair and ship recycling, which involve industrial work in which the number of the jobs required depend on output and can be calculated, transport and transport services create many jobs that are fragmented in the sense that they include tasks in the industries that they serve, and that cannot be aggregated. Furthermore, it is misleading to attribute job creation to the provision of transport or transport services when the demand for those services is derived from other economic activity and such activity can state its claim to having indirectly created jobs through the transport it uses. Thus, the standpoint adopted when submitting the proposals in this section is that they will promote economic progress, including new industries, and that job creation will ensue, whether directly from entrepreneurship in new ventures or through savings and investment as an outcome of greater efficiency and, furthermore, that it would be disingenuous to produce a scorecard of jobs that will result.

4.2 Supply of shipping

Ship owning by South Africans does not depend upon the terms of the Ship Registration Act, 58/1998, and the averred unfriendliness of the ship register is not responsible for the virtual extinction of South Africa's maritime transport sector. Shipping is a footloose global industry open to any entrepreneur. South Africans can own, charter, manage and operate ships that carry the country's bulk imports and exports as well as those of most other countries and can even enter the liner trade as non-vessel owning common carriers (NVOCC). However, shipping businesses are unlikely to be located in South Africa unless fiscal concessions are forthcoming, as at least 80% of ship operation in the world is conducted tax free. Such concessions have been available in South Africa through accelerated depreciation allowances on ships and, during the many years in which a fleet of South African flagged ships existed, income tax was avoided by the ship owners.

Intense competition in the supply of shipping space and the globalisation of production during the past few decades have resulted in fundamental changes in the concepts of ship ownership and national fleets. Thus the notion of a fleet of nationally-flagged ships owned by nationals carrying national cargoes is regarded in shipping circles as nostalgic or even sentimental. Although there are still fleets of ships owned by individuals and firms in countries with a tradition in ship owning, but mostly flagged elsewhere, ship owning is no longer a straightforward concept, but has become complicated through the separation of the owner of the asset from the dealer, charterer, manager and operator. Ship owners are often also traders in the market for ships and shipping space, usually through the exchange of shareholdings and often in the form derivatives and futures. Demise charterers might operate ships, but time or voyage chartering will not include operation, while managers might equip, crew and market shipping services, but not necessarily operate ships. All these functions for any ship are likely to be located in different countries.

The demise of nationally-owned, -flagged and -operated ships by South Africans was not the consequence of the unfavourable tax regime or any local circumstance, but rather the outcome of the worldwide trend towards the restructuring of the supply of shipping caused by the globalisation of production and competition. Shipping companies were obliged to raise the efficiency of their performance by amalgamations to achieve economies of scale, to specialize in trade according to their comparative cost advantages and to outsource the functions involved in traditional ship owning. South Africa's shipping sector in common with the shipping sectors in many other countries, including Canada and Australia, was insufficiently developed internally for the amalgamations, specialisation and outsourcing required for maintaining its role in international shipping.

The prospects for South Africa to regain a role in international shipping thus depends not on the acquisition and national-flagging of ships by its nationals, but rather on the comparative cost advantages that might enable South Africans to specialize in one of the facets of ship ownership, use, management or operation in one of the different branches of shipping supply. The ownership of the ships as assets and their flagging and registration are incidental to the business of actually trading in shipping space. While the revival of a South African sector for maritime transport is no doubt economically desirable, its pursuit would be fruitless if the comparative cost advantages to succeed are lacking. When the same issue was considered in Canada, the conclusion was reached that Canada had no competitive advantages in shipping and should accept its reliance on the open market for shipping services (Sletmo). That might also apply in South Africa, as, according to Jones (2004), South Africa remains a nation of miners, manufacturers and farmers, not a nation of shippers, ship operators or ship owners.

Among the compelling reasons for wanting to revive South Africa's maritime transport industry is the belief that it would create many jobs for seafarers in view of the fact that South African cargoes generate some 4% of the performance of the world's cargo shipping and are presumably available for transport by local ship owners. The assumption that South African ship owners will recruit local seafarers no doubt implies that their ships will be registered in South Africa and that the register will impose such a condition. However, national registration is not a requirement of ship ownership by nationals and history has shown that the employment of local seafarers does not necessarily follow from national ship ownership, largely because of wage differentials that are of cardinal importance to successful competition. Indeed, the imposition of crewing quotas in the conditions for ship registration is one sure way of deterring national flagging (although it can be imposed for the registration of fishing vessels in South Africa's Exclusive Economic Zone).

Although South Africa's bulk imports and exports account for a substantial share of world shipping, the cargoes are not necessarily ripe for the picking by South African owned or operated ships. Firstly, there is the difficulty that specialisation in trades and the amalgamation and mergers in the supply of shipping have rendered it difficult for newcomers to gain a foothold in the markets. Secondly, most of South African bulk cargoes are sold f.o.b at the insistence of the buyers of the commodities and changing that condition might be costly for the sellers. The initiative for selling c.i.f and the arrangement of transport should thus come from the producers. When seeking charters to carry their products in the past, these producers invariably found the rates of overseas suppliers of shipping cheaper than those of local suppliers, mainly because the latter could not compete against the economies of scale of larger competitors. Such economies stem largely from the ability of ship operators with large fleets to optimise their utilisation through cross-trading.

In the intercontinental liner trade, there is no prospect for South Africans (or anyone else) to enter as ship owners, as finance for the huge investment needed will not be forthcoming if the risks in the foreseeable future are taken into account. However, South Africans can and have entered the business as NVOCC, which provides scope for creating supply chains for customers at minimal capital outlay.

The adoption of a tonnage tax as an alternative tax regime for ship owners/operators and the other measures needed to render the finance and registration of ships in South Africa an acceptable business proposition is advocated elsewhere in this report. Whether that will be sufficient to attract the location of ship owning and operation to South Africa and the national flagging of the ships, needs to be assessed with targeted owners in mind. These are, firstly, South African ship owners and operators who presently conduct their business offshore and register their ships under foreign flags; secondly, foreign ship owners who might be willing to re-locate their businesses to South Africa and adopt the South African flag; and thirdly, South African entrepreneurs who are keen to enter the bulk shipping business. Neither of the first two targets seems to be attainable for the reason discussed in sections 1.6.2 and 1.6.6, although Grindrod can readily be approached to ascertain its attitude. In regard to the scope for new entrants among South Africans, it is contended in the following discussion that entry into the shipping business is no longer straight-forward and a separation of focus is required between at least the following:

i. financing the acquisition of ships by granting ship mortgages, which is normally a specialised banking function;
ii. trading in ships as assets, which involves high risks and the means to remain invested for long periods, but which can bring substantial returns through astute timing of the market; it involves the acquisition of ships and their chartering out, and usually also dealing in freight derivatives;
iii. employing ships through chartering and marketing and selling shipping space; the business does not require much capital and potentially enables substantial returns, while losses can be contained, but the ability to predict trends in the geographic demand for commodities and cycles in the supply of shipping is indispensable for success;
iv. managing ships on behalf of ship owners and bareboat charterers, which might involve crewing, fuelling, provisioning, maintenance and repair as well as marketing and chartering in or out;
v. specialising in specific functions in the value chain of the production of the supply of shipping, which have many facets.

With all these business activities, it is also necessary to specialise in a particular segment of the market according to the trade; e.g. dry bulk distinguishing between ores and minerals, and agricultural products; petroleum products; chemical products; gas; break bulk and general cargo; containerised goods; motor vehicles; and refrigerated products.

Among the difficulties that will confront newcomers to the business of ship operation are the following:

i. Many cargo owners prefer to deal with major ship operators in order to avoid the risk that otherwise would be incurred when contracting with operators of single or a few vessels.
ii. Virtually every aspect of shipping is highly regulated though international conventions with provisions that are incorporated in the domestic legislation of many littoral countries. For the new entrant to the business there is little alternative but to rely on professional managers to ensure compliance.
iii. Markets for shipping space are notoriously volatile and shipping rates are influenced not only by trade cycles, but by shipbuilding cycles, which traders in ships and shipping space need to understand.
iv. Shipping business requires a long term or lifetime commitment, while the returns are erratic and profits are usually worthwhile only over periods that bridge several cycles in demand and supply.

These remarks are intended to explain that entry to the shipping business as a ship owner or operator or manager is daunting for newcomers and a rush to revive South Africa's maritime transport industry is unlikely, notwithstanding changes to render ship registration more friendly and other measures to support such friendliness. In order to promote entrepreneurship in shipping, it is proposed that suitable candidates be afforded training, coaching and mentoring in shipping business at public expense. That will require study and training both locally and overseas, but also placement with shipping enterprises overseas that are willing to foster prospective entrepreneurs in return for a reward or in terms of a cultural exchange programme. See section 4.12. Training and coaching should be mapped out with the purpose of developing the trainees' abilities in specific shipping business, and success should be recognised by the Industrial Development Corporation and local investment banks as adequate to warrant consideration for the finance of maritime transport projects.

Such training projects will contribute to the development of an industry embracing the various functions in the supply of maritime transport in world markets and include functions that fulfil the demand generated by South African imports and exports. Although the ostensible purpose in accordance with the scope of this report is employment, it would be far-fetched to start calculating the number of jobs that will eventuate.

All the measures proposed to develop a shipping industry located in South Africa are unlikely to succeed unless the core of the demand that it aims to satisfy is forthcoming locally. The potential existence of such demand is by far the main hope when projecting a vibrant South African shipping sector, but it needs to be created by the exporters of bulk commodities, as well as the importers. Those exporters should be induced to negotiate the sale of their products c.i.f and negotiate the shipping themselves. Without such a local demand developing, it is likely that those efforts to encourage ship owning and operation in South Africa and the coaching and mentoring of entrepreneurs for the purpose would be fruitless. South Africa's latent shipping industry must be aroused through existence of local demand within the business community to which the suppliers of the shipping belong. Otherwise offshore locations are likely to offer more scope for their business. The key to unlock the potential for South African shipping business is thus held mainly by its mining industry.

The sale of commodities c.i.f instead of f.o.b does not merely depend upon the decision of the sellers. The buyers, especially in the Far East, wield immense power in the market and are committed to favouring their national shipping, which can often be supplied at the lowest rates. Furthermore, the major suppliers of commodities are powerful multi-national undertakings and the deals that they transact usually set the terms in the markets, obliging small sellers to be follow suit. The scope for South African exporters to change the way they do business cannot be pursued in this report, except to emphasize that unless that comes about, South African shipping entrepreneurs will need to seek their customers in cross trades, which involves international business far more difficult than alternative business prospects in other industries offering better returns.

The Government has the means to induce or coerce major exporters to create a demand locally for shipping services, but whether that would in the national interest if it comes at the expense of lower prices for bulk exports, needs to be established through economic analysis. As explained in section 1.6.4, ship ownership by South Africans would not necessarily improve the Balance of Payments as the foreign exchange gained through freight income must be set off against the costs of purchasing and operating ships internationally. Other countries, such as Canada and Australia, have accepted that relying on foreign shipping is in their best interests.

It should be gathered from the foregoing discussion that the preparation of a formal shipping policy for South Africa would be difficult as the policy would need to focus on a speculative role for South Africa in the supply of shipping in the future, without certainty that the role could be achieved and without making policy that could frustrate development in a different manner from that envisaged. The recommendation in this report is that South Africa should forego the declaration of a shipping policy for the time being, in common with most other countries without fleets of ships or extensive domestic short sea routes. Instead, it is recommended that the Merchant Shipping Act No. 57 /1951 be replaced with more concise legislation in line with similar legislation in the United Kingdom, which successfully accommodates all the shipping functions mentioned in this section as well the different facets of ship ownership. The reformulation of the act is probably long overdue and a new act could constitute the essence of the shipping policy of South Africa.

4.3 Ship registration and flagging

4.1.1 National flags and ship registers

Although the notion of 'ship's flag' is often associated with national ownership of ship that is crewed by seafarers of the same nationality and which carries cargoes of the flag state, flagging is of lesser importance in these issues than ship registration. International law requires every merchant ship to be registered in a sovereign state with the intention that the state exercises proper control over the ship. Such control should ensure order in the conduct of international shipping, but effective control requires a genuine link to exist between the owner of the ship and the flag state, as conceived at the High Seas Convention 1958. Although an unequivocal definition of 'genuine link' has not been formulated, many states insist that some beneficial ownership of a ship accrue to nationals of the state as a precondition to registration. Beneficial ownership is also an imprecise concept, except for sole ownership, which enables the flag state to require the ship owner to reside locally. Otherwise, even minority ownership in a corporation is adequate, as for example in the USA. The South African Ship Registration Act 58/1998 requires national ship owners to have a place of business, not necessarily the principal place, in South Africa, and actually to do business, rather than merely display a name plate.

Registers that require the beneficial owner of the ship to be genuinely linked through nationality to the flag state are regarded as closed registers. Flag states that allow ship registration without concern for nationality are regarded as open registers and are considered not to have effective jurisdiction over the ships on their registries. When a merchant ship is registered in a sovereign state different from that of the ship owner, the flag of the state is regarded as a flag of convenience (actually a register of convenience) and will be declared as such by the Fair Practices Committee of the International Transport Workers Union. As ships can be chartered as bareboats for long periods or their economic lifetimes, with the charterer exercising full control as if the owner of the ship, the concept of a disponent owner has evolved and the nationality of the charterer or disponent owner qualifies as a genuine link for the purposes of ship registration. The S.A. Ship Registration Act 58/1998 allows registration of ships on bareboat charter (and dual registration of ships on time charter while registered in the country of ownership).

In view of all the concern about building a national register of merchant ships, it is important to bear in mind the potential benefits for South Africa, some of which need to be derived through restrictive conditions that deter registration. Foremost is the condition requiring the employment of national seafarers, which presupposes that there are skilled seafarers available for employment at rates of inclusive remuneration that render the ship operation under the South African flag competitively worthwhile. Next is revenue from taxation, especially on profits, and registration fees, although such revenue would have to be negligible in order to compete with alternative registries. Other local income comes from the purchase of provisions, bunkers and ship repair, although the expenditure by shipowners/operators on such items will be incurred in foreign ports if the overall outlay enables cost savings. The main benefit, apart from job creation, results from foreign earnings for the carriage of freight or savings in foreign exchange if national ships instead of foreign ships are employed, net of the foreign cost or hire of ships, wages to foreign crew and expenditure in foreign ports, including insurance (which is usually laid- off overseas).

With job creation being the major aim of acquiring a national fleet of ships at the present time, it should also be borne in mind that that the wages of national crews have to be subsidized in most of the countries with closed registers that require such employment. Subsidization takes different forms, but usually includes exemption from income tax for seafarers employed on ships trading internationally. South African seafarers also receive exemption while serving on international voyages.

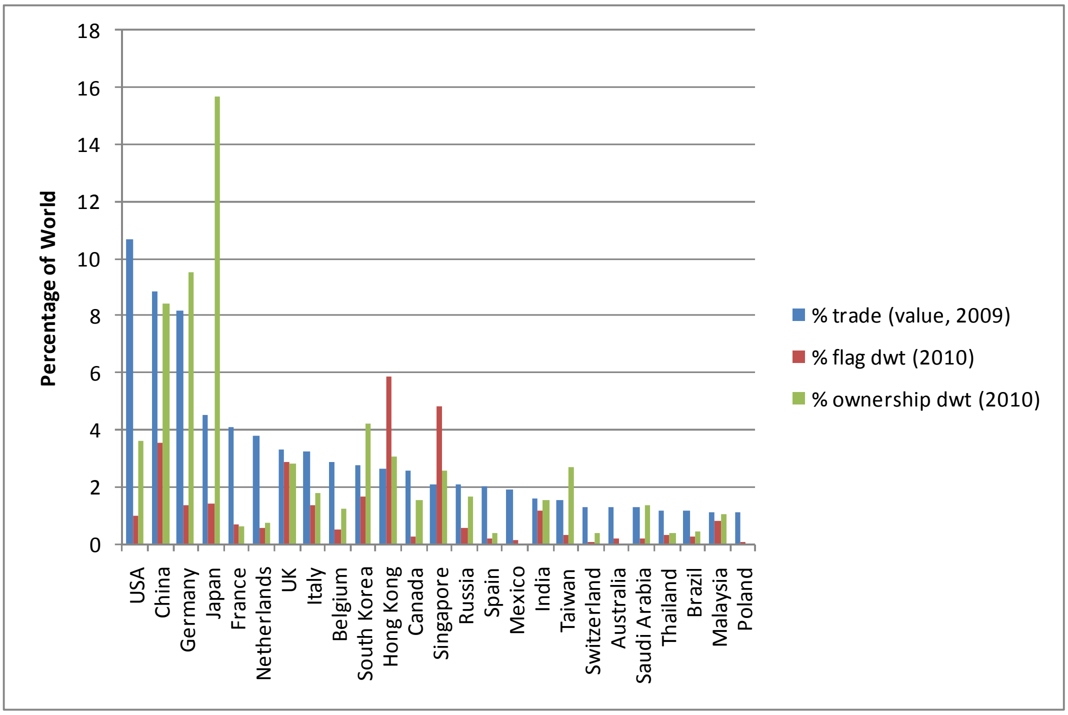
In general, acquiring a national fleet of ships would create local business and employment in the services associated with the supply of shipping, such as ship finance and management, ship broking, trading in ships and shipping space (i.e. development of the so-called paper market) and ship insurance, apart from an expansion of existing associated services. However, the acquisition of national fleet of ships virtually from scratch has yet to be achieved by any country in modern times.

The purpose of this brief review of ship register issues is to make five points of argument:

- That the opening of the South African Ship Register to all comers holds few benefits in return for the odium of a flag-of-convenience status and that resort to such a measure should be left to countries with few resources and little alternative but to seek dubious ways of deriving income.
- That in common with other countries in which labour is unionised, South Africa cannot design a closed ship register that will attract the registration of merchant ships for the purpose of providing jobs for seafarers, unless the unions are prepared to agree on rates well below the rates stipulated in the ITF Standard Collective Agreement.
- That no provisions of the existing South African Ship Register have been identified that impose onerous conditions for ship registration and need to be uplifted, and that the register is both modern (it conforms to the ship register of the UK) and appropriate for South Africa.
- That all the measures to create a package of attractive conditions for investment in South Africa by firms trading in the supply of shipping should be implemented and that such measures should enable the option of a tonnage tax on ship earnings instead the normal tax on company profits, higher priority of claims against ship mortgages, flexibility in the comparative remuneration for seafarers in order to maintain consistency with local wages, employment conditions in line with international fair practice and the availability of free maritime education, training, coaching and mentoring (see section 4.4).
- That other policies or business codes that would dilute earnings from foreign investment in South Africa in the supply of shipping are sure to deter such investment in view of the international alternatives enabled by the footloose nature of the industry.
- That open ship registers that attract many ships can be created by enabling ship owners/ship operators to reduce operating costs, but that the income from such registrations for the flag states is not likely to be much, except for a very small economy.

In Figure 4.1, the maritime engagement of 25 of the major trading nations of the world is illustrated. As the figure shows, there is little correlation between the share of the world's trade of these countries and the flags of registration of the ships, which means that national fleets are no longer of importance for trade domination and that countries can trade successfully without owning ships.

Figure 4.1: Maritime engagement of 25 major trading nations

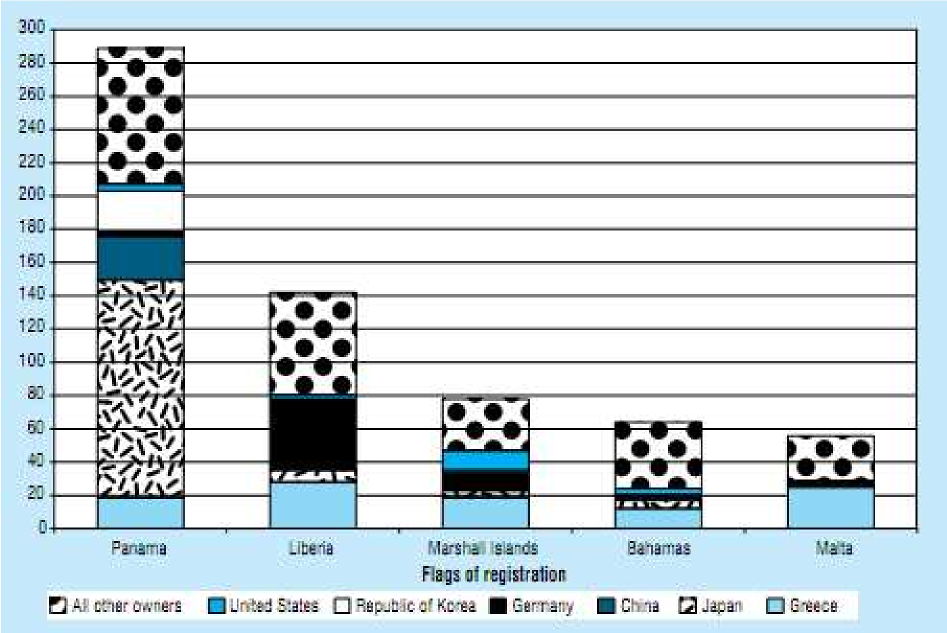


Source: Compiled from UNCTAD

4.1.2 Successful open registers

The notes accompanying the TOR for this study require comment on successful open registers, of which the register of Panama is the largest (with 8 100 registered vessels totalling 289 million dwt comprising 23% of the world's fleet) followed by that of Liberia (with 2 456 vessels totalling 142 million dwt comprising 11% of the world's fleet). The registry of Panama caters mainly for owners from China, Greece, Japan and the Republic of Korea, while the flag of Liberia is used mostly for ships owned by Germans and Greeks. The major open registers and the nationalities of the ship owners using those registers are illustrated in Figure 4.2.

Figure 4.2: Major open and international registries, 2010



Source: UNCTAD

The main features of the Panamanian register are that there are no restrictions on ownership (i.e. for the owner to be Panamanian), the registration process is simple and cheap, ship mortgages are easily registered, revenues generated from international maritime commerce are not taxed and capital gains from the sale or transfer of a vessel registered in Panama are exempt from tax. Panamanian Law requires that 10 per cent of the crew be Panamanian.

Although prohibited as a general rule, Panamanian legislation does allow for the dual registration of ships on charter, including bareboat contracts, provided that the government of the other country of registration also consents to the dual registration. All dual-registered vessels are subject to the laws of Panama with respect to safety and other operational matters, but remain subject to the laws of the country of original registration with respect to rights of ownership, ship mortgages and the payment of taxes.

Panamanian standards for ship safety are advertised as “among the most stringent world-wide”. However, it is reported that the comparatively high detention rate for Panamanian-flagged ships has placed the country on international blacklists as a "medium risk" flagging nation. That rating implies that Panamanian ships might be violating international safety, labour or environmental codes and alerts countries with port state control to ensure their inspection.

The Liberian register similarly has no ownership restrictions. Registration fees are low. Tax is in the form of a tonnage tax (at 10 US cents per GT). There are no requirements on disclosure of beneficial ownership of a vessel. There are also no restrictions on the nationality of the crew.
The Liberian Register is administered off-shore in the USA by the Liberian International Ship & Corporate Registry (LISCR, LLC). LISCR advertises its “commitment to safe and secure shipping”. Liberian-flagged ships have a low detention in the United States and Europe, which implies that Liberian ships rarely face serious consequences from inspection.

4.4 South African ship register

Notwithstanding the adoption of the Ship Registration Act 58/1998 intended to render ship registration in South Africa attractive to ship owners and bareboat charterers, no trading ships are currently on the register, although as explained in section 4.3 that might be the outcome of the globalisation of the production of commercial shipping rather than the fault of the register. Indeed, the terms of the register were well conceived at the time of its introduction and there little to criticise in its application as the primary ship register for South Africa, bearing in mind that it also serves as the register for non-trading ships.

4.1.3 Second register

Several countries have introduced second registers with the object relaxing some of the restrictions of their primary registers, mostly on the required nationality of the crews employed and on the standards of ship classification. The main purpose has been to induce national owners and charterers to cease flagging-out and to encourage the repatriation of flagged-out ships, but the success achieved has been mixed. The introduction of a second register for South Africa in the present circumstances would serve little or no purpose insofar as there are no trading ships to retain on the register, while its availability for non-trading vessels is undesirable.

Second registers are unlikely to attract new registrations unless their features match those of the countries lending their flags for ship owning convenience. Those countries usually have no labour legislation that impose conditions on maritime employment or that restrict the employment of seafarers to nationals or labour unions that could enforce minimum wages. Such freedom in the employment of seafarers constitutes the major attraction of open registries, apart from tax avoidance, and is the criterion usually adopted by the ITF for declaring open registries flags-of-convenience in pursuance of its fair practices campaign.

4.1.4 Tonnage tax

At least 80% of ship operation in the world is conducted tax free. Even in South Africa, incentives in the form of accelerated depreciated allowances on ships for many years allowed ship owners to avoid paying income tax.

A measure on which great store is placed to encourage ship ownership in South Africa is the introduction of a tonnage tax in line with the taxation of shipping profits in many other countries. In a nutshell, a tonnage tax contrasts with normal corporate tax based on commercial profits during a year by ignoring actual profits and computing a notional profit on the basis of the number and size of ships operated, and taxes that profit rather than the actual commercial profit. A tonnage tax is usually set so that the notional profit and the actual tax are minimal. In some European countries, the tax is also applied to ensure that there is a genuine link between flag registration in the European Union and the ship operator benefiting from the tax, while in the United Kingdom, a condition for a shipping company or operator entering the tonnage tax regime is that the company or group must fulfil a minimum training obligation with the Department of Transport.

A tonnage tax regime in South Africa is believed to be an essential feature of the package of measures intended to promote national flagging, even though its importance might be a matter largely of perception now. Nevertheless, such a tax will be an important consideration for local incorporation when it is charged at a low rate in lieu of other corporate and ownership taxes.

The present status of the process of designing a tonnage tax in South Africa is that the Tax Design Unit in the National Treasury (Department of Finance) is investigating its implications and the other fiscal measures that would be required to make the package of taxes attractive. The Unit seems to have a pragmatic view since shipping currently yields little or no local tax revenue and the package of taxes to attract local registration (and ownership) might be set at a nominal (i.e. very low) rate only.

The introduction of a tonnage tax in the United Kingdom was first proposed by the Chamber of Shipping in 1997, recommended by the Shipping Working Group set up by the Government in 1998 and by the Transport sub-committee of The Environment, Transport and Regional Affairs Select Committee in 1999. The option of the tax became law in the Finance Act of 2000. In South Africa, the introduction of the tax was also proposed in 1997 following on its introduction in the Netherlands in 1996, but is still under investigation.

Four years after its introduction in the United Kingdom, it transpired that the tax had

- helped to reverse the decline in the UK merchant flee;
- ensured that shipping companies kept their bases;
- helped to promote the training of cadets and ratings;
- helped to protect the contribution made to overseas earnings by the shore-based market sector of the shipping industry.

4.1.5 Mortgage ranking

One long-standing disadvantage of ship registration in South Africa is the priority accorded claims for debt incurred against ship mortgages as the mortgagee is ranked after a supplier of ship necessaries in terms of the Admiralty Jurisdiction Regulation Act No. 105 of 1983, in contrast to the contrary ranking in most other countries. Finance for South African ships against mortgages has thus always been difficult to obtain. The need to amend the act was realised more than fifteen years' ago and steps to do so were initiated by the Department of Transport, but as yet that has not come happened. The status of the process has not been established.

4.1.6 Labour issues

Labour issues have been discussed in part 1 and it remains to be emphasized in this section that the employment of local seafarers is really the nub of the problem confronting efforts to promote national shipping. Most of the countries that have taken measures to retain ships on their ship registers or to induce the repatriation of ships have done so inter alia with a view to ensuring the employment of their seafarers and have made quotas of such employment a condition of registration. Thus, shipping companies that seek to benefit from tonnage taxes by registering on the national ship register are obliged to employ a percentage of local seafarers as crew. Most of those countries have in turn been obliged to back the requirement by the subsidization of crew costs in one way or another. For example, air travel expense by British crews joining or leaving ships in foreign ports is borne by the government. Some countries subsidize wages.

In order to create employment through national shipping, subsidies for crew costs will need to be forthcoming in South Africa, or the labour unions will need to compromise on remuneration, in which event foreign ship owners or operators would be attracted to the South African Ship register. Those owners/operators would need to establish a genuine link with South Africa; otherwise the South African flag would risk being declared a flag-of-convenience.

It is unlikely that lower remuneration will be acceptable to local seafarers while subsidies would surely lead to claims from employers in other industries, especially as shipping has no claim to special dispensation over other industries (see section 4.13). Without the prospect of savings in crew costs and taking in to account all the other circumstances of registration in South Africa, it is likely that open registers will still be preferred.

The recruitment of South African seafarers without testing their HIV-status beforehand (as precluded by section 7(2) of the Employment Equity Act, unless deemed justifiable by a labour court in terms of section 50(4)) is an issue upon which no comment can be made, as such testing is a personal matter. Most foreign ship owners would require seafarers seeking employment to be tested.

4.1.7 Proposals concerning ship registration

The **proposals** concerning ship registration and associated matters based on the discussion in sections 1.6.1 - 3 and the foregoing comments in this section are as follows:

i. The option of a tonnage tax in South Africa should be introduced as soon as possible, notwithstanding that the time for doing so might have passed, as the need was initially advocated by local ship owners, responsible officials, and others as far back as 1997.
ii. The Admiralty Jurisdiction Regulation Act 105/1983 should be amended as soon as possible in order to improve the prospects for mortgaging ships on the South African Ship Register, especially as the need for the amendment was initially identified and advocated in 1993.
iii. The attitude of the seafarers unions to the determination seafarer's remuneration and the testing of their HIV status before employment should be established once and for all.

No important changes to the South African Ship Registration Act 58/1998 seem to be needed and neither the opening of the South African Ship Register to ship owners or operators not genuinely linked to South Africa, nor the introduction of a second ship register are recommended.

The prospects for South Africa to regain a role in international shipping thus depends not on the acquisition and national-flagging of ships by its nationals, but rather on the comparative cost advantages that might enable South Africans to specialise in one of the facets of ship ownership, use, management or operation in one of the different branches of shipping supply. The ownership of the ships as assets and their flagging and registration are incidental to the business of actually trading in shipping space.

4.5 Proposal concerning coastal shipping

In Part 3, coastal shipping is dealt with as an existing South African industry comprising a single domestic firm on the supply side largely dependent on and to some extent competing with the liner companies providing intercontinental container services. The conclusions and recommendations in that part of the study concerned the retention of the existing supply.

In this section, the prospects for promoting coastal shipping without concern for the existing supply and the requirements for inducing the demand in the interest of efficient resource utilisation are discussed and proposed public intervention is outlined.

In the event that the existing firm providing domestic transport by sea on the South African coast should cease to operate, it is unlikely that new investors would be forthcoming, except in an operation added to the much larger business of feedering traffic together with some regional trade. Furthermore, domestic shipping and to some extent also regional shipping are not standalone businesses and the new investors would have to come into the market in collaboration or partnership with link providers in door-to-door supply chains. Neither the domestic, nor regional markets for shipping are lucrative. The regional market is limited by the logistical strategies of the ocean liner companies in which imported cargo transhipped and feedered from South Africa to East and West Africa is increasingly being carried by their liners on routes integrated into their networks, while regional trade itself is small and not growing (see Part 3). That could also apply to feeder services between South African ports in the future, although restricting cabotage to domestic carriers would or could (legally) preclude foreign-flagged ships being employed for the purpose. The foreign liner companies could conceivably feeder traffic to South Africa from an offshore hub (i.e. offshore from South Africa), but as they are able to determine the carrier of their feeder cargo, it is unlikely that any independent domestic carrier would risk investment for a return dependant on arbitrary decisions by intercontinental liner companies. As these companies compete on the quality of their services, they would be unwilling to rely entirely on the same feeder carrier. (OACL carries feeder cargo for many different liner companies, but mainly for its part owners, Maersk Line/Safmarine).

Domestic coastal shipping (which is the main topic of this section) involves more than port-to-port container transport. It requires the supply of door-to-door multi-modal services according to fixed schedules with high supply chain integrity. That is what road haulage as coastal shipping's chief competitor offers. Similar qualities of services are required of regional shipping services but these are not exacting (in Southern Africa), as the impediments to competing regional road haulage (such as border controls) are not conducive to service punctuality. Investment in the supply of domestic coastal shipping must consequently provide for the warehousing of cargo at ports in order to collect shiploads and to distribute on demand, as the storage capacity of customers will usually be too small for the quantities of cargo carried by sea. Thus domestic coastal shipping needs to absorb the inventory costs that the scale economies of the ships would otherwise impose on customers. The storage capacity of the warehouses is also required to buffer the irregularity of coastal shipping services caused by adverse weather and delays at ports because of congestion. In some circumstances, it might be necessary for the coastal ship operators to own the cargo if the holding costs otherwise incurred by customers would deter their use of sea transport.

Despite the services described and associated services (e.g. cargo tracking) necessary to ensure supply chain reliability comparable to that of road haulage, coastal shipping cannot compete with the speed of delivery achieved by road hauliers and must seek advantage in the market through lower pricing. In Europe, shippers contend that road transport is able to command a premium of approximately 50% in pricing over short sea shipping on account of more rapid delivery i.e. short sea shipping needs to be 35% cheaper than road haulage for comparable services apart from transit time. The latter discount is needed, in fact, because coastal shipping is unable to exploit its inherent comparative cost advantage in consequence of the externalities favouring road transport, as described in Part 2. In principle, state subsidies could be justified to eliminate the distortion in the market for transport along the coast, but that is unlikely to be politically acceptable in view of the fact that road haulage is far more labour-intensive than shipping.

In the light of these comments, the following measures are **proposed**:

i. Cabotage should not be restricted to South African-flagged ships, but the concessions proposed should be granted only for ships in which South Africans genuinely have a financial interest. Cabotage restrictions are likely to be counter-productive – see section 4.6. As explained in Part 3, competition for domestic cargoes on the coastal shipping routes is forthcoming from road haulage only and the restriction of cabotage is likely to preclude only feedering by the deepsea liner companies, on the assumption that the existing coastal ships would be excluded from the restriction on the grounds of partial beneficial ownership in South Africa. However, the restriction on feedering by the liner companies (which is only a small percentage of the total feedering – see Part 3), would interpose a third party in their supply chains and be a retrograde measure in accordance with world practice, which is to integrate supply chains under single management in the interests of supply efficiency.
ii. The existing rebates on port charges for coastal shipping, previously known as the “coastal tariff”, should be formalised and remain.
iii. Coastal ships should be allocated berths for preferential coastal use in the Ports of Durban, Cape Town, Port Elizabeth and East London.
iv. Public warehouses for coastal cargo should be established as formal public/private ventures at the four ports, each warehouse serving to collect and distribute cargo for coastal shipping and as a buffer enabling the economies of scale of ships to be realised, while providing for the delivery of small quantities ex stock at short notice, as well as to cushion the effect of irregularities in the timing of voyages attributable to weather conditions and port congestion.
v. The operators of the coastal shipping services should be entitled to decide on the actual mode of transport of cargo delivered for carriage by sea according to prevailing circumstances i.e. the cargo may be transported by road haulage or rail.
vi. Coastal ship owners should have the option of choosing the proposed ‘tonnage tax’ if introduced into South Africa’s tax regime and should otherwise be exempt from the taxes that international shipping avoids or evades.
vii. As the domestic coastal shipping presently survives on the coverage of fixed costs by feeder services, it would be necessary for a standalone service to receive subvention. Sources of such income could be a percentage of the revenue from road tolls paid by heavy freight vehicles on coastal routes as well as on the inland route between Durban and Cape Town, although that is unlikely to be sufficient. Short of an outright subsidy, coastal ship owners could be paid a royalty or tribute for every tonne of cargo carried in respect of the costs of road infrastructure damage so saved. The royalty would be

arbitrary and adjusted to the need, as the cost savings could not be calculated, and in any event the design parameters for road construction and the 'maintenance-by-inspection' policy do not enable such savings to be calculated. Outright subsidies are unlikely to be acceptable politically as ship owning is capital-intensive and the diversion of road freight to sea transport would result in job losses. (It is estimated that the ratio of jobs in coastal shipping to road haulage for equivalent transport tasks is about 1:40 – see Part 2 for an estimate of the number of vehicle trips and personnel required by road hauliers to perform the task now undertaken by coastal shipping.)

viii. The warehouses proposed in item (d) would need to function as cost-recovery entities integrated in the door-to-door coastal service. Independent profit-seeking warehouses and the coastal ship operators would not share a mutual aim, which could result in the downfall of both enterprises. A public enterprise (similar to the public body responsible for the warehouses serving coastal shipping in India) is unlikely to function with sufficiently low costs to serve its purpose efficiently.

ix. Regional coastal shipping services as distinct from regional feeder services could be promoted in a similar manner to domestic coastal services subject to bilateral or multi-lateral agreements with the littoral countries in Southern Africa with which South Africa trades, but the volume of traffic is small and significant growth is not expected by the existing coastal ship owner. Regional cabotage restrictions that remove the feeder traffic from the deep sea liner companies would result either in less frequent services, delays to cargo and higher shipping costs by the regional importers and exporters, or the liner companies would tranship cargo elsewhere and not feed from a port included in the range of regional cabotage restriction. It should be appreciated that feeder traffic is port-to-port and that the effect or service irregularity cannot be eliminated through the interposition of buffer warehouses, nor could the coastal ship operator equal the frequency of the calls by all the deep sea liners feedering cargo to the regional ports.

The proposals contained in items (i) and (ix) are given in outline only as the details if implemented will require negotiations with the coastal operator or a newcomer to the trade and with the liner companies, Transnet and potential investors. None of the proposals is novel as similar measures with variations, plus other proposals, have been adopted elsewhere in the world, although the demand for coastal or short sea shipping continues to decline wherever land transport offers an alternative.

As a start to explore the proposals contained in this section, it is suggested that they be incorporated in a draft policy statement circulated for comments to the shipping industry and government departments concerned. It should be noted that the proposals differ from the policy statements in the Draft South African Maritime Transport Policy, 2008, mainly insofar as cabotage is concerned. However, it seems that paragraph 3.3.4.4 of that draft advocates the removal of cabotage restrictions on inter-regional road transport, which, of course, could then compete more freely with regional shipping.

4.6 Expected consequences of domestic and regional cabotage restrictions

Cabotage restrictions have been considered in section 1.6.5 and in Part 2, because they are frequently proposed, but non-intervention is recommended in this study. In view of the benefits often ascribed to such restrictions on the southern Africa coast and the envisioned large fleet of nationally-registered ships that is presumed would eventuate, the consequences are examined in this section taking account of the seaborne traffic described in Part 2. Domestic as well as regional cabotage restrictions are considered in a predictive analysis of “if” statements. These predictions are made without discussing the underlying economics and logistics, which would require lengthy explanations to be interposed.

At the outset, the intentions of the restrictions on cabotage need to be identified. These are to compel ship owners (or the existing ship owner) trading on the coast to register the ships employed on the South African Ship Register and to require the employment of national seafarers through the conditions for ship operation imposed by the register. Alternatively, the purposes could be to ensure that the ships are beneficially-owned by nationals irrespective of the flagging and are sheltered from competition by way porting ocean liners, so promoting domestic or regional sea transport.

The following analysis is intended to explain that neither of the purposes described could be achieved successfully through cabotage restrictions, It is necessary beforehand to refer to comments made in section 3.2 concerning liability of cargo loss in terms of port-to-port bills of lading. Such liability for cargo loss is not affected by transhipment between carriers within the same shipping line or company even though transhipment is not specified in the port-to-port bill of lading and even if transhipment is disallowed in letters of credit. If cabotage restrictions necessitate transhipment between separately-owned liners and feeder ships, liability for cargo loss might not be covered in the port-to-port bill of lading issued by the ocean carrier so requiring additional procedures and disrupting the seamless supply chains (or at least documentation chains) that the ocean carriers provide for customers - implications, as a consequence of cabotage restrictions, are not considered in this report.

If domestic cabotage is restricted to nationally-flagged ships, but feeder cargo is not regarded as cabotage, the supply of domestic sea transport might cease as the cargo currently offering for that purpose is insufficient for viable coastal shipping. OACL as the existing carrier of domestic cargo might not deem it worthwhile to re-register its ships and be subject to the registration conditions for that purpose, although the choice of a tonnage tax could be an adequate additional inducement. If the restriction on cabotage is not applicable to ships in which South Africans have a beneficial interest and feeder traffic is not defined as cabotage, no change in the existing shipping services on the South African coast is likely. Some way porting by ocean liners would be prevented, but the quantity of traffic is small and unlikely to require any additional supply of domestic shipping. If, in these circumstances, feeder cargo is defined as cabotage, some additional feeder cargo would probably be gained by coastal shipping, but it is feasible for the only ocean carrier really affected by the restrictions to avoid feedering or to do so from a foreign hub. The additional cargo is unlikely to be sufficient to require more capacity on the coast. In summary, no matter whether restrictions on domestic cabotage require national registration or beneficial ownership of coastal ships or whether they apply to feeder cargo as well as to domestic cargo, the outcome is unlikely to hold any advantages for South Africa. In fact, restrictions on domestic cabotage will probably have the effect of targeting mainly the one ocean carrier that undertakes its own feedering of South African cargo (i.e. MSC), if feeder cargo is regarded as cabotage, and more of an administrative nuisance than a progressive measure. It will certainly not result in a fleet of new ships operating on the South African coast. Furthermore, it might deter MSC from developing its traffic through the Port of Ngqura as a transhipment hub (see Part 2).

If cabotage is restricted on a region of the southern African coast to nationally flagged ships of the region, but feeder shipping is excluded from the definition of cabotage, it is likely that the supply of coastal shipping for regional cargoes will decline or cease, as the volume of traffic at stake is too small for viable competition between regional carriers. OACL might be willing to re-register for the purpose, but probably not if other regional carriers attempt to vie for the limited traffic. The exclusion of ocean liners from the trade would lead to higher rates. This argument also applies should beneficial ownership be substituted for national flagging. If regional cabotage is defined to include cargo (containers) transhipped at regional ports for feedering to other regional ports, it is possible that the existing coastal shipping would be augmented by two or three more ships to carry all the regional and feeder traffic, although some of the liner companies serving the trunk routes might decide to feeder from hubs outside the region and so reduce the traffic moving regionally. These alternatives are speculative and based on the assumption that regional cabotage could be restricted, whereas the multilateral co-operation and administrative enforcement needed are unlikely to be readily forthcoming and the prospect of such restrictions lies well in future, especially as the overall outcome would be to dampen what little trade exists.

The recommendation that cabotage restrictions be excluded from any intervention by the government in coastal shipping has taken the foregoing analysis into account. One other aspect of cabotage that might be an issue is its preclusion in bilateral agreements. Agreements with clauses to that effect have been concluded by South Africa, but whether they still exist has not been researched for the purpose of this report.

4.7 Proposed transhipment hub

The prospects for the transhipment in South Africa of containers carried by liners on intercontinental voyages and the establishment of a terminal hub for that purpose in a South African port are dealt with extensively in Part 3. In this section of Part 4, proposals are made for a strategy that might succeed in creating such a terminal hub, which will bring a new industry to South Africa. As the hub will constitute a viable business undertaking earning substantial foreign exchange, no subvention will be needed apart from initial investment by Transnet, which can be recovered.

The benefits of a transhipment hub for intercontinental cross trades stem from direct jobs created for the handling and storage of containers, apart from temporary jobs needed during construction work, as well as from jobs that will be created for the repair, refurbishment and scrapping of containers. Furthermore, transhipment hubs offer an opportunity for the establishment of footloose processing industries nearby and which are earners of foreign exchange. Such industries have been described in sections 1.8 and 3.8.

The proposed transhipment hub for international traffic should not be confused with the transhipment facilities at the ports in South Africa where imported containers and containers for export are transhipped to other domestic ports or between South African and regional ports, but is conceived as a hub fulfilling a strategic function in the logistics of the intercontinental liner trade. The traffic though the hub is thus traffic that could be transhipped elsewhere far from South Africa, but is routed through the hub because of the economies that the liner companies can achieve by consolidating container flows on links in their network of services in order to optimise the utilisation of the capacity of their larger ships.

The distinction between transhipment facilities at gateway ports for general cargo and a hub chosen by liner companies for the transhipment of their intercontinental traffic is often characterised by their commitment to the use of the hub either through investment in the infrastructure and/or in the operation, or through agreement on volumes of throughput. The arrangement with the port owners is mutual as the investment in the hub is at risk if insufficient transhipments are forthcoming, while investment in the larger liners is at risk if the hubs are unavailable or do not perform efficiently. In most instances, the future of a transhipment hub for intercontinental container traffic is not assured without commitment to its use by a major liner company.

The analysis of the transhipments at South African ports as contained in Part 3 shows that the volume of laden containers landed for transhipment and onward carriage to foreign destinations is small.

Virtually all these transhipped containers and the empty returns move between origins or destinations in other continents and origins or destinations in Africa. A small quantity of container traffic formerly transhipped at Salalah has been diverted to the Port of Ngqura for transhipment. Although that traffic is bound for East Africa and the intention seems to be to avoid feedering it through pirate-infested seas, the presumption is that the use of the Port of Ngqura for transhipment is preferable for reasons of cost, i.e.in order to raise the utilisation of the capacity of the large liners from the Far East calling at Ngqura. As far as can be established, these are the first transhipments captured by a South African port from a hub functioning exclusively for transhipments on a main transcontinental east-west route.

The Port of Ngqura is undoubtedly the South African port with the physical features likely to attract transhipments by a major liner company, although its design capacity for 4500 TEU ships is inadequate and needs to be raised in order to handle ships of 9000 TEU size, which is feasible (see section 3.5 for a description of the benchmark requirements).

In order to attract transhipments to Ngqura of containers carried on intercontinental routes and that otherwise would be transhipped elsewhere as well as to induce liner companies to consolidate traffic for shuttle services by large liners to terminate at the proposed hub at Ngqura, it will be necessary to market the advantages based upon insight of the economies and logistics of liner operation. As the adoption of Ngqura as a hub for a substantial number of transhipments by a major liner company is unlikely to succeed without participation by that company in its operation, the best tactic by Transnet would seemingly be to develop a new transhipment terminal in the port in partnership with a liner company or terminal operator of world standing.

The eleven top operators of container terminals are listed in Table 4.1.

Table 4.1: World's eleven top container terminal operators and percentage shares of transhipment market

Operator	% Share	Operator	% Share
Hutchinson	14,0	*Mediterranean Shipping Co	4,0
*APM Terminals (Maersk)	12,0	Eurogate	3,0
PSA (Port of Singapore Authority)	12,0	*Evergreen	2,0
Dubai Ports World	10,0	SSA Marine	2,0
*Cosco (China Shipping Co)	7,0	*CMA - CGM	2,0
Shanghai International	7,8		

* Liner companies or associates of liner companies

As shown in Table 4.1, approximately 76% of the transhipments at international hubs are handled by the eleven top operators. Of these, operators, liner companies or companies associated with liner companies handle 27%. It is evident from these percentages that the involvement of a major terminal operator or liner company is necessary to develop a major transhipment hub in the network of intercontinental liner services.

All the ports in Southern Africa and on the nearby islands in the Indian Ocean that serve as transhipment hubs currently have limited capacity to compete with the Port of Ngqura. These are Luanda (Angola), Walvis Bay (Namibia), Port Louis (Mauritius), Toamasina (Madagascar), Dar-es-Salaam (Tanzania), Lamu and Mombasa (Kenya), apart from Durban, Port Elizabeth and Cape Town. The terminals at Luanda and Walvis Bay are operated by APM Terminals and are thus included in the service network of Maersk Line. The terminal at Dar-es-Salaam is operated by Hutchinson. Only Durban has at present more capacity than Ngqura, although congestion limits its effective use. A potential competitor for transhipment on the main East-West route to Indian Ocean destinations is the new Vallarpadam

International Container Transhipment Terminal at Kochi, which is India's first venture into the global transhipment industry, operated by Dubai Ports World.

Although it is recommended that a major liner company should be induced to share in the investment in a hub at Ngqura, which the liner company might insist on dedicating to its own use, that need only be one or two container berths initially. If Ngqura is to fulfil at least several of the many functions that have been envisioned for its future, container berths for use by general shipping will need to be retained, but should not cause problems as the port is constructed to allow considerable expansion. Both private and public container terminals exist in many ports and for other types of cargo, also in South African ports, but competition between container terminals in a South African port would be an innovation.

Based on the analysis in Part 3 and the preceding comments, it is believed that the **strategy** for developing an international hub for container transhipment at the Port of Ngqura should include the following alternative steps by Transnet.

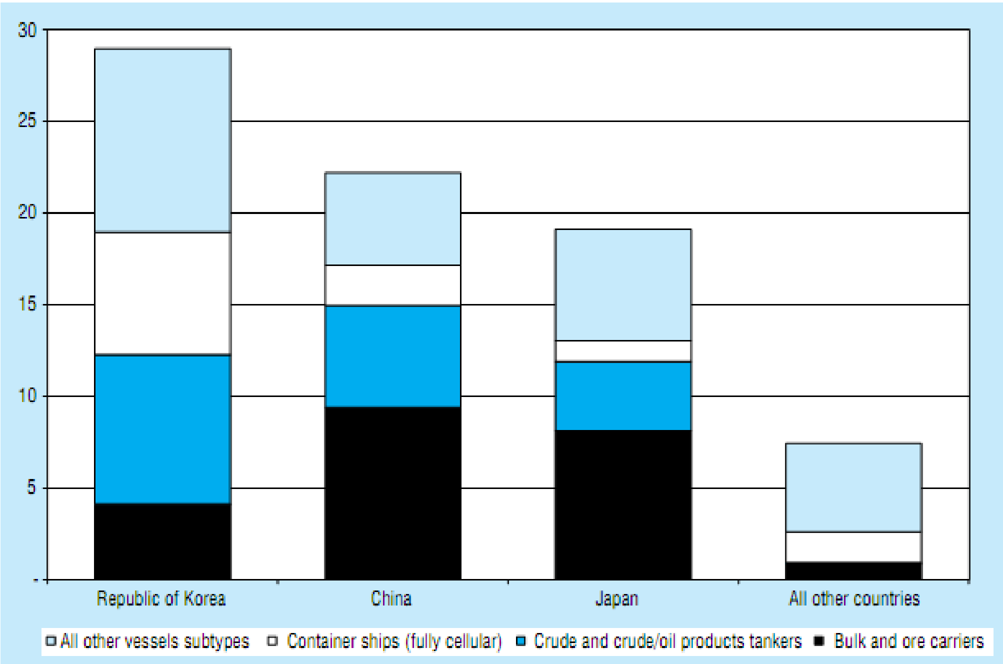
i. Seek proposals for the development of the two undeveloped container berths in partnership with a major terminal operator who undertakes to secure a guaranteed number of international transhipments (both origin and destination to be foreign) for Ngqura; include the existing container berths in the concession and operate all the berths as a common user terminal; promote the terminal as a hub also for transhipments to other South African ports by providing feeder facilities, including facilities for coastal shipping, in order to ensure a core of transhipment traffic; require the concessionaire to promote the interception of cargo for processing at the Coega IDZ in collaboration with the Coega Development Corporation.
ii. Alternatively, seek proposals for the development of the two undeveloped container berths in partnership with a major liner company that undertakes to bring a minimum number of containers moving between foreign origins and destinations to the terminal for transhipment; allow the berths to be dedicated for use by the liner company and its alliance or conference affiliates; allow transhipment to other South African ports using ocean liners or coastal shipping. As the pricing of the container lifts and other services at the terminal operated by the liner company for its own use and that of affiliates might be lower than pricing at the other terminal in the port and because its use by affiliates could be construed as common use, competition between the terminals is likely to ensue unless disallowed by the concession. While competition might be desirable, it would constitute a fundamental change in the traditional operation of South African ports. Even if disallowed, it might be difficult to prevent, but equivalent pricing could readily be enforced while similar handling efficiencies could readily be maintained, especially as rates of 28 lifts per hour are presently being achieved at Ngqura.

The participation of a global terminal operator or major liner company in the exploitation of a transhipment hub at Ngqura is probably the only manner in which a transhipment hub, as a new international industry, could be established in South Africa. Once the hub is in operation and the concessionaire is locked into the investment, the prospects for the expansion of the traffic would be assured. If the investment is unlikely to be forthcoming, that would indicate that the scope for a major transhipment hub in South Africa probably does not exist.

4.8 Shipbuilding proposals

The building of large commercial ships takes place predominantly (over 90%) in three Asian countries (South Korea, China and Japan) as illustrated in Figure 4.3. Several other countries in South-East Asia have notable shipbuilding activity including Malaysia, Indonesia and Vietnam. In 2009, Brazil built 35 ships in six active shipbuilding yards and India delivered 33 ships from 13 yards. In that year, South Africa delivered five small ships from three yards. Ship building in South Africa is currently includes only pleasure craft, harbour craft and trawlers.

Figure 4.3: Deliveries of new buildings, 2009 ('000 gross tonnes)



Source: UNCTAD

The view in section 1.7.3 is that there is little prospect for viable shipbuilding in South Africa that could compete with shipbuilding internationally, as the costs of local materials and labour are in excess of the costs of similar inputs by shipbuilders against whom South African shipbuilders would be have to compete, apart from the subsidies that they might be receiving. Those countries are also the cheapest source of the machinery and equipment that South African shipbuilders would need in order to produce complete ships. Very substantial subsidies would have to be forthcoming to enable South African shipyards to re-enter the international shipbuilding industry.

The industrial policy in South Africa is one of targeted support (e.g. motor industry development programme). The Industrial Policy Action Plan (IPAP 2) of 2010 promotes long-term industrialisation and industrial diversification by expanding production in value-added sectors with high employment and growth multipliers that compete in export markets and in the domestic market against imports. New focus sectors in IPAP 2 are metals fabrication, capital and transport equipment, green and energy-saving industries and agro-processing.

There is a specific sub-programme dealing with “boatbuilding and the associated services industry”, which is summarised in Table 4.2. “Boatbuilding” implies the building of small craft such as tug boats, fishing boats, pilot boats, patrol boats, and pleasure boats rather than ocean-going ships; although there is no definitive distinction as large cruise liners and even submarines are sometimes referred to as boats.

Table 4.2: Summary of IPAP2 boatbuilding and the associated services industry

The industry is divided into five main categories namely:

- Building of boats, specifically small craft in the form of sailboats, inflatables, motorboats and activity crafts (kayaks and canoes)
- The manufacture and trade in engines and engine systems
- The manufacture and trade in marine equipment and accessories
- Consumer goods and services (e.g. charter/rentals, repairs, maintenance, retail, events management, yacht clubs)
- Business goods and services (e.g. consulting, design, surveying, training, government agencies, etc.)

Key opportunities are:

- Export opportunities into Africa and the Indian Ocean Islands, with specific emphasis on light commercial vessels, such as RIBS and Patrol Vessels
- Opportunity to leverage on world class reputation as catamaran manufacturers and expand into the developing markets, and markets new to the boating culture
- Clustering of the industry on a national basis will bring together critical mass to implement industry development programmes to upgrade machinery and business processes within SMMEs
- The international markets for catamarans remains largely untapped and growth in the export market could become a real driver for job creation
- The sector shares many skill sets with the renewable energy, aeronautical and automotive sector. Therefore the development of a broad base of skills in composite manufacturing could translate into other sectors.

Constraints are:

- The boatbuilding sector is mainly focused on manufacturing for the leisure boat market and the recent global recession has had a knock on effect similar to other sectors producing luxury and lifestyle products. The international market is starting to bloom again but growth is cautious at present.
- Inadequate investment at firm level in acquiring new technologies and machineries to stay abreast of international innovation trends will start to have its impact felt on the export market. Competitor countries are driving the technological growth of the sector and there is a threat that South African manufacturing will be left behind.
- The lack of industry specific skills with a clear link between academic learning and the workplace results in a technical skills deficit for boatbuilding as well as a managerial knowledge deficit. These constraints are compounded by the high level of tacit knowledge required by a boat-builder. The high level of import duties on input materials is a constraint and doubly so when one considers that there is no duty on the completed vessels being imported into South Africa.
- The lack of a co-ordinated national approach and support to policy making in relation to the recreational craft sector locally has had the effect that over regulation and red tape is stifling the domestic boating market and amongst other things, leading to monopolistic behaviour amongst the larger players.

Key action programmes are:

- Industry Standards and Accreditation, i.e. developing standards for quality, safety and environment in order to enable all boatbuilding firms to build to international standards in an effort to increase competitiveness and access to international markets.
- Trade Policy, i.e. reviewing the applicability of the current tariff structure for the boatbuilding industry including rebates provisions and proposed new measures where applicable.
- Skills Development Strategy, i.e. developing an industry skills development strategy. Investigating possibility of establishing an industry driven training initiative, a boatbuilding apprenticeship system and a strong industry support mechanism to assist firms to participate in the various training opportunities. Specific training for the boatbuilding sector is lacking and high level composite training is a real priority. A

number of scarce skills have been identified and a national boatbuilding training strategy needs to be drafted and implemented

- Designation for Public Procurement. Local industry has the capacity to provide the vessels needed by government and parastatals and local firms should be given the opportunity to do so. Some firms already supply patrol vessels and RIBS but South African expertise and vessel construction should promoted within all the spheres of government
- Industrial Financing, i.e. developing financial support measures suitable for the boatbuilding industry.

In view of IPAP2, no further proposals are made for boatbuilding in South Africa, although it might be worthwhile to value the net socio-economic benefits of local boatbuilding (including savings in foreign exchange) in comparison with the value of the socio-economic benefits that could be gained by acquiring boats from overseas if the border prices would be less than the domestic prices, mainly to ensure that any element of subsidy in local acquisition does not become excessive. As a belief persists that shipbuilding in South Africa (i.e. the building of commercial ships for the international market) is a viable proposition with great propensity for job creation, it is also recommended that detailed costing be undertaken to calculate the amount of state subsidy that would be needed in order price the product competitively in the international market. The analysis should then be pursued in order to compare the subsidy with the value of all the local benefits (e.g. job creation, local purchasing, skills development) and the value of its opportunity cost. Without studies along those lines, the net benefits of local ship and boatbuilding remain speculative.

4.9 Ship repair

The main features of the market for ship repair in South Africa have been described in section 1.7.1 and mention has been made of the difficulty in determining whether it is fully exploited or whether work is being foregone by the industry for particular reasons, as enquiries by ships' agents about prices and the availability of capacity does not necessarily imply that a genuine contract of work is in the offing. Furthermore, ship repairers in South African ports compete against each other and do not disclose information on enquiries about the availability of their capacity for work, which are made long in advance, making it difficult to survey the potential market. However, South African ship repairers believe that additional drydocks or syncrolifts would enable more work to be undertaken.

The ship repair industry in South Africa currently provides between 4 000 and 5 000 jobs directly, of which approximately 2 500 are filled by semi-skilled workers. Sub-contracting for partial work and the supply of material and parts accounts indirectly for the employment of another 10 000 workers. Minor and major repairs are carried out on between 1 500 and 2 000 ships annually, mainly at repair berths, while some 150 to 200 ships are drydocked annually for routine surveys and/or repairs. The annual turnover of the ship repair industry is estimated at R2 billion. As the volume of repair work fluctuates according to the market for shipping, although anti-cyclic to some extent, and for other reasons, more precise statistics cannot de furnished.

Apart from repair berths in most of the ports, the infrastructure available for ship repair in South Africa comprises the large Sturrock Drydock at Cape Town (built more than 60 years ago) that can accommodate ships up to Panamax size (80 000 dwt) depending upon their beam, as the dock is too narrow for some ships of that size; the medium size drydock (Prince Edward Drydock) at Durban capable of docking Handymax ships (50 000 dwt) up to 32 metres in breadth; the smaller drydock at East London (Princess Elizabeth Drydock) which can accommodate Handysize ships (30 000dwt) of 20 metre breadth; and the Robinson Drydock at Cape Town of similar capacity. There is also a syncrolift at Cape Town, intensively used for the repair of fishing vessels and two floating docks at Durban. There are also slipways for small vessels at Port Elizabeth and Mossel Bay. One of the floating docks, which can lift ships up to 8 500 dwt, is privately owned. Apart from this dock, all the other infrastructure belongs to Transnet, but has not been adequately maintained for many years. Transnet is now in the process of letting the drydocks and syncrolift as common user facilities to private undertakings, which are likely to be consortia of ship repairers at Durban and Cape Town.

There is also a small naval drydock at Simon's Town, that is in a dilapidated condition and in need of refurbishment. Many proposals have been made to upgrade the dock and use it also for the repair of non-military craft, but none of those proposals have been implemented, mainly because joint use for civilian and military purposes is not feasible, especially as dockings have to be scheduled long in advance and so preclude emergency repairs to naval craft. The use of the dock, with naval personnel in various capacities, for repairs to non-military vessels would also be difficult to price in competition with repair work at Cape Town, if an element of subsidization is to be avoided.

Once the ship repair industry has acquired control of the infrastructure and is willing to invest in additional facilities, it is likely that its output will expand. Speculative analysis of the market has indicated that turnover could be raised fivefold with a corresponding increase in employment. That would necessitate the allocation of increased areas in the ports for ship repair infrastructure, including a new drydock (at a cost of between one and two billion rand). However, none of the existing ports adjacent to the CBDs of cities have adequate space available for new facilities and expansion would have to be located at Richard's Bay, Saldanha or Ncqura (although the environmental RoD for the latter port does not specifically include ship repair). Richard's Bay seems to be the most suitable port for a new large drydock, while Saldanha is the obvious choice for repair work on the drilling platforms employed on the west coast of Africa.

The construction of a very large drydock for Cape size ships on the South African coast has been of interest to overseas ship repairers for many years. Cape size ships are too large to transit the Suez Canal and must sail around the Cape of Good Hope (similarly ships required to sail around Cape Horn because their size precludes passage through the Panama Canal are also described as Cape size ships). As the dimensions of the Suez Canal have repeatedly been improved with the increasing size of ships, the present size of a true Cape size bulk carrier passing around South Africa's coast is now upwards of 240 000 dwt. Such ships include tankers en route from the Arabian Gulf to Europe and returning as well new ore carriers between Brazil and China. During the past two months, Vale of Brazil has taken into service the *Vale Brasil*, which is a mammoth 400 000 dwt VLOC (Very Large Ore Carrier), with a breadth of 65 metres and a draught of 23 metres. At least 16 additional ships of that size are on order with another 18 likely to follow. Such ships, which achieve extraordinary economies of scale, are needed to enable Vale as the world's largest supplier of iron ore to compete with Australian suppliers, who are located much nearer the market in China.

Several of these ships are being built by Daewoo in South Korea and according to media reports Daewoo is interested in the construction of a large drydock at Richard's Bay, which is ideally located to service the VLOC and to repair damage that might occur off the South African coast .One reason why none of the previous proposals for the construction of a Cape size drydock in South Africa has come to fruition is because the ship repair industry (at least overseas) tends to regard such docks (which have an indeterminately long lifetime and little or no opportunity costs once built) as amenities to be provided at public expense and public funds for its construction were not forthcoming. The competitive ability of South Africa,s ship repair industry, once the drydocks have been acquired under lease, will, to some extent depend upon the rental and conditions of lease.

In view of the ongoing negotiations between representatives of the ship repair industry and Transnet concerning the refurbishment and transfer of the drydocks and other repair facilities to control by private enterprise and the communication between overseas ship repairers and the Government concerning a new drydock at Richard's Bay, no proposals on ship repair seem to be warranted in this report.

Ship repair also includes the repair of the variety of craft, including drilling platforms and rigs, used by the oil and gas exploration industry, as described in section 1.7.4. The South African Oil and Gas Alliance (SAGOA), which is supported by the Department of Trade and Industries through the Export Market and Investment Assistance (EMIA) scheme, undertakes industry capability development and marketing for the industry and liaises with the Government and Transnet. IPAP2 also supports the development of upstream oil and gas services and equipment. The policy notes that as the major economy in the region, underpinned by good infrastructure and a solid base of engineering capability and effective institutions, South Africa is well positioned to become a major hub for the supply of oil and gas services and equipment to the West and East coasts. An upstream ship repair hub is specifically targeted, i.e. the repair, maintenance and upgrade of various kinds of oil and gas marine vessels such as drilling rigs, pipe laying vessels and various kinds of work barges. The oil rig repair business at Cape Town is, therefore, likely to grow while the repairers can rely on the agglomeration of maintenance and repair industries near the port in order to achieve the competitive pricing of their work. IPAP2 foresees a similar opportunity in Durban/KZN as oil and gas activity grows on the east coast of Africa. The policy acknowledges that a major constraint is the underinvestment by Transnet in infrastructure, the unavailability of port space, the inconsistent and high pricing of facilities, poor scheduling of facilities and a general lack of collaboration and engagement with the industry to resolve issues and pursue the market.

In view of the responsibilities of SAGOA and its engagement with the Government and Transnet on issues concerning the growth of the industry, it would not be appropriate to submit any proposals concerning its development in this report.

4.10 Establishment of a green ship recycling facility

Ship recycling is dealt with in section 1.7.2 and in this section proposals are made to introduce the industry into the South African economy in a manner that will assure compliance with the requirements of the Hong Kong Ship Recycling Convention 2009. The market for ship recycling is huge and as ship owners become increasingly committed to scrapping their ships (or disposing of their ships for breaking) in the environmentally proper manner, compliant ship recycling facilities will be in great demand. It is anticipated that the Hong Kong convention will be ratified by sufficient states to come into force by 2015, but in the meantime members of the International Maritime Organisation (IMO) are being encouraged to implement the requirements of the convention and several large ship owning companies and associations of ship owners have already undertaken to abide by the rules.

If South African firms are to be permitted to compete in the market for ship recycling, it is imperative that steps be taken now to promote the investment needed, as suitable infrastructure and equipment will cost approximately one billion rand and the pre-requisite feasibility and environmental studies and the construction work will take at least until 2015 to complete. In order to ensure that South African ship recyclers are in the market when the Hong Kong Convention is formally implemented, it is thus essential that the process involved in establishing the facility begins now.

The benefits for South Africa of ship recycling as a new industry are briefly as follows:

- the industry is sustainable as upwards of 1500 ships will be due for scrapping each year from 2015 and will yield at least 8 million tonnes of steel, presently valued at some US$ 2,4 billion, apart from non-ferrous materials, machinery and other equipment;
- ship recycling is labour-intensive and at least 500 workers could be directly employed in the simultaneous dismantling of ten ships every two months;
- ship recycling requires facilities for handling the waste materials, including hazardous waste, under strict control, necessitating additional employment;
- waste materials and dismantled machinery and equipment need to be transported to smelters or to facilities for refurbishment and repair, also creating employment;
- trade in the recycled materials, machinery and equipment generates further employment and will probably be sold overseas and earn foreign exchange;
- many of the workers required for direct employment can readily be trained as the skills needed are not difficult to acquire, although aptitude is important to the learning process;
- some of the associated jobs require higher skills, but are also amenable to on-the-job training;
- dismantled and refurbished machinery and equipment can be used in the ship repair industry; and
- ship recycling facilities need to be located away from cities and so do not promote urbanisation.

The disadvantages of ship recycling stem from the environmental consequences, as it is both a noxious and unsightly industry, but compliance with the requirements for handling hazardous materials can mitigate the noxious effects, while visual pollution is unlikely to be of consequence in a port handling exports of ores and minerals in bulk, adjacent to an oil refinery, which are envisioned for the Port of Ngqura.

Shipbreaking is not allowed by Transnet in South African ports and it is improbable that any suitable site outside of the port enclaves on the South African coast could be found that would be approved for ship recycling in terms of existing environmental and coastal management legislation (although the Hong Kong Convention does not prohibit shipbreaking on beaches). Only the ports of Saldanha, Ngqura and Richard's Bay might provide suitable locations for green ship recycling should that be permitted in South Africa, with Ngqura being the most likely candidate.

The following **proposals** are made in the light of the preceding remarks:

i. That South Africa should ratify and adopt the Hong Kong Convention, 2009, on the Safe and Environmentally Sound Recycling of Ships (Hong Kong Convention), accepted in May, 2009.
ii. That the legislation adopting the convention (that is likely to come into effect in 2015) should provide for the voluntary implementation in the interim of the requirements of the convention.
iii. That the official mechanism (or regulations) for such voluntary compliance be created in order that the requisite authorisation and notifications for a ship recycling facility (SRF) in South Africa be issued and that the procedures for preparing ship recycling plans and inventories of hazardous materials as well as pre-stripping of ships for dismantling, be in place as soon as possible.
iv. That Transnet should be requested to select a suitable site in port precincts in conjunction with an Environmental Impact Assessment for the establishment of a green ship recycling facility complying with the requirements of the Hong Kong Convention.
v. That Transnet should collaborate with intending ship recyclers, perhaps by calling for proposals, when conducting the study in order that unique infrastructure and dismantling methods that mitigate the environmental consequence of ship recycling be taken into account.
vi. That account should also be taken of the ship recycling technologies employed in the OECD countries and the USA, where a small number of ships are recycled under strict environmental controls.

If the policy of the Government (as implemented by Transnet) to prevent ship breaking or ship recycling in any of South African ports to continue, it is likely that a ship recycling facility will be established in another country in Southern Africa by South African investors.

4.11 Discouragement of maritime services BPO to other countries

The offshoring of functions concerned with liner shipping have been described in section 1.10. Not only are jobs lost as a consequence of business process offshoring (BPO), but the maritime transport involvement of the holders of those jobs and their experience is also lost to the industry, as usually they will seek re-employment in other industries. BPO consequently contributes to the dwindling in size of South Africa’s maritime transport service sector. BPO can probably not be prevented insofar as it furthers global business efficiency, although legislation under consideration in the USA is entitled the Prevention of Offshoring Act, which is intended to close a tax loophole that favours offshoring. Nevertheless, studies in the USA have reached the conclusion that BPO, which has accounted for very many job losses, is not all that bad, as the retraining of those displaced enables higher skills to be acquired.

In South Africa there can be no doubt that the offshoring of tasks involved in shipping services is detrimental to the economy and that measures to discourage offshoring are desirable. At the same time, the offshoring of shipping functions to South Africa from other countries should be promoted.

As present, BPO from other countries is rewarded in South Africa with substantial incentives paid over three years for every new job created, with bonuses when job creation targets are reached. These incentives could also apply to jobs saved by not offshoring. Although the principle seems to be sound, as the economic consequences of unemployment can hardly be less than the benefits of employment, the administration of the rewards in order to prevent abuse would be exceedingly difficult. A more feasible, if also more contentious, manner of discouraging BPO of shipping functions carried out in South Africa would be to withdraw government or public enterprise patronage of shipping companies that have offshored service functions, if that can be established unequivocally. As an importer of large quantities of containerised goods, the government and the public enterprises are surely entitled to wield their purchasing power in the economic interest of the country, especially as the private efficiency measures that would be prevented would otherwise benefit foreign undertakings.

In order to attract BPO in the shipping industry from other countries, it is proposed that apart from the incentives available, training as well as coaching in the skills required be provided through government sponsorship of training facilities. The motivation for such sponsorship, for which provision already exists, would be the need to re-develop South Africa’s maritime transport industry. The scope for training and coaching is considered in the proposals for maritime education and training.

Proposals

i. That the BPO of shipping service functions to other countries count against tenders for government or public enterprise business in a similar manner to the penalties for non-compliance with BEE requirements.
ii. That firms intent on creating jobs in the supply of shipping services through BPO from other countries be assisted with the training and coaching of candidates in the specific functions needed.

4.12 Proposals concerning maritime education and training

The lack of local entrepreneurship in shipping business is one of the many reasons why legislative changes to construct a friendly ship register, reduce tax on profits from ship operations and alter priorities in admiralty jurisdiction are not likely to result in the emergence of a fleet of nationally owned or operated and crewed ships. While business response to administrative measures to induce private investment and employment is in any event not always forthcoming, entrepreneurship in shipping also requires vocational education and experience that is generally not manifest in the South African business community, or has found more fruitful application overseas. Business culture in the supply of shipping, often stemming from family tradition and the existence of shipping institutions, commodity trade exchanges, ship brokerage houses, maritime education and training academies and other maritime establishments are features in all countries prominent in the ownership and operation of the world's shipping. Those features spawn the entrepreneurship in maritime transport that propagates on-going business in shipping. To start or restart such an industry in shipping proper in South Africa as distinguished from the associated services industry is a long term process in which maritime education and training must fulfil a pivotal role[1]. While there are a variety of establishments for maritime education and training in South Africa, the output of those establishments is currently concentrated more on the provision of maritime transport services than on the production and supply of shipping.

There can be no doubt that foreign shipping would still be employed to carry the cargoes if South African importers and exporters purchased and sold f.o.b and c.i.f respectively, even though South African firms located overseas would probably be among the suppliers of the shipping. In order to inspire and cultivate the entrepreneurship and investment needed to meet the demand (or some of it) locally and hopefully with nationally-flagged and crewed ships, is a task of education, training, coaching and mentoring in maritime transport. The main difficulties of course, are that producing local entrepreneurs in the supply of shipping for that purpose would be fruitless without a local demand, while importers and exporters are unlikely to be willing to jeopardise their existing supply arrangements by seeking to rely on a local supply that might not be forthcoming, or, at least, not at comparative prices. Obviously there will need to be co-operation between importers/exporters as users of shipping and the education and training institutions intent on producing South African suppliers of shipping. The prospects for such co-operation in the normal course of business are unpromising, but the Government has sufficient leverage to induce the exporters of mining products to support the development of a South African shipping industry, hopefully in the spirit of economic patriotism. Through such efforts to promote national shipping, the Government would be intervening in both the demand and the supply, and the logical extension of such interventions would be public ownership of mines that create a demand for the shipping of bulk exports and the ownership or operation of ships that comprise the supply. Neither of those interventions would be exceptionable in South African history[2].

[1] The process could be given a kick-start by inducing an enterprise such as Island View Shipping – see section 1.2. - to repatriate its business to South Africa if South African importers and exporters of bulk commodities could also be induced to arrange the transport of the cargoes they import or export, so creating a local demand.

[2] Transnet's predecessor, the South African Railways and Harbours Administration was a department of government that did own ships at one time that carried coal between Durban and Cape town and traded to the Far East; the operation was a forerunner to the establishment of Safmarine.

Although the focus in this section is on maritime education and training to promote national ship owning, the contention throughout this study as explained in section 4.2 is that much of the supply of shipping is disaggregated into production elements that are dispersed globally and that South Africa's participation in the industry will have to be confined to those functions in which it has attained comparative advantage in the market. Such an advantage in the shipping industry is largely knowledge-based, which accounts for its footloose nature. During the past fifty years, innovation in shipping has resulted in more changes in the technology and organisation of the supply than in other transport industries – with commercial consequences that have destroyed many international shipping firms of long-standing. In order to compete successfully, entrepreneurs in shipping business must comprehend the geography, economics and commercial mechanisms of the physical trade that generates the demand on which their businesses depend and the technology and organisation of the supply, including the complex expectations that motivate shipbuilding cycles and the manner in which they influence market conditions. Continual knowledge-transfer through education, training, coaching and mentoring as well as through participation in conferences, seminars, workshops and industry forums is also indispensible for a thriving community in maritime transport and services in all their facets.

Section 1.9 contains a summary of the existing maritime education and training establishments in South Africa. There are obvious gaps, of which the lack of institutions intended to produce leaders specifically in shipping business is one. While the universities fulfil some of that need to the extent of providing the educational background for advancement in the industry, they are not breeding grounds for new ship owners and operators, nor are any of the other local education and training institutions. Furthermore, few of the universities or other institutions provide the coaching and mentoring in a structured manner that promote graduates through their careers. Another gap is the evident lack of co-ordination in the conduct of maritime education and training in a manner that ensures adequate coverage of all the aspects needed to equip participants in maritime business. Perhaps the most important omission is the lack of formal traineeships in the maritime transport and maritime transport services industry following on the completion of the education and training courses. This topic requires extensive discussion as there are firms in the maritime industries that do have induction programmes and provide in-house training as well as academic bursaries followed by learnership employment, but it is not possible to review all the details in this study. There is however, no central body that evaluates all the tuition and career opportunities available to those aspiring to careers in shipping and which can be accessed for guidance via a website.

Prior to the adoption of the Skills Development Act 97/1998 and the establishment of the Transport SETA in 2000, much effort and expense was incurred by the maritime transport industry in South Africa in the conduct of the Maritime Industries Training Board, which was tasked to co-ordinate and implement maritime training, including seafarer training, in a cost-effective manner. Negotiations were also conducted with the World Maritime University, funded by the IMO, in order to explore the prospect for funding a maritime training institute for the Southern Hemisphere at vocational level in South Africa and much time was spent on planning a venue for all maritime training facilities, but the choice between Cape Town and Durban could not be resolved. The initiative in the project was superseded by the establishment of the Transport SETA, with a maritime chamber. It did not pursue the proposals[3].

There is little or no scope at present for the establishment of a central maritime academy in South Africa providing education and training in the production and management of shipping because of the lack of a domestic shipping industry to absorb the output. Furthermore, the existence of the variety of institutions and facilities for training in the supply of cargo and other maritime transport services and the inclusion of education and training in the functions involved in the curricula of academic and other courses in the subject of logistics, precludes the centralisation of such education and training. It also precludes the establishment at marginal cost of a learning institution that could initiate tuition specifically in the business of shipping.

The following **proposals** are made on the premise that education, training and skills development are basic requirements for economic growth and indispensible to job creation through the expansion of the maritime transport and maritime and cargo services industries in South Africa:

i. An inventory should be prepared of all the disciplines needed to fulfil the functions involved in the value chains of the supply of maritime transport and maritime transport services and the tuition available through educational and training courses as well as programmes for skills development, the entry requirements for courses, whether the course providers are accredited by SAQA and the level of learning, current fees, venues and residence requirements.
ii. A list of jobs that fulfil the functions identified in (i) according to titles or short descriptions and the categories of firms that provide employment in those jobs should also be prepared.
iii. One purpose of the information collected and analysed in (i) and (ii) should be to construct a website sponsored by the NDOT that furnishes the following information for those seeking employment or seeking to pursue or advance careers in the maritime transport and services sector:
    a. A description of jobs, their functions in the value chain, the qualifications needed, the tuition available, whether the providers of the tuition or learning programmes are accredited, the levels of learning, and the categories of firms that provide employment in the jobs described;
    b. How and where to pursue enquires about study, training and skills development in chosen directions.
iv. The website should be constructed in a manner that also enables employers to perceive the proper job titles or job description for the functions they require and the facilities available for acquiring the requisite knowledge or skills to fulfil those functions.
v. The website should also enable the interest in the various vocations in maritime transport and maritime transport services to be gauged from the number of hits recorded.
vi. The inventory proposed in item (i) should be analysed and amplified in order to identify a list of jobs that are essential to the supply of the shipping required for South Africa's bulk imports and exports, especially jobs that the importers and exporters would need to create if they undertook the arrangement of the shipping themselves.

[3] Although SAMTRA was established – see section 1.9.

vii. The Government should urge or leverage the importers and exporters of commodities in bulk, especially the mining houses, to examine the feasibility of arranging the shipping on which their business depends and to create jobs for that purpose, as assisted through a programme of education and training especially sponsored by the Government.

viii. The programme should include not only education and training in shipping, but coaching and mentoring by experienced shipbrokers, ship managers and operators, which might necessitate the arrangement of internships at firms overseas. (There are presently several graduates in maritime studies at South African universities employed by shipbrokers and ship owners/operators overseas who might be amenable to return and form a nucleus of managers available to importers and exporters willing to commence with the shipping of the cargoes in which they trade.)

ix. As there are many freight forwarders presently in South Africa whose business it is to arrange shipments for importers and exporters of any type of cargo, it needs to be emphasised that the intention of the scheme described in items (vi) to (viii) is to induce and enable South African importers and exporters to employ their own shipping or shipping owned or operated by other South Africans, rather than to rely on freight forwarding services that under present circumstances results in the employment of foreign shipping.

x. Although SAQA provides career guidance and maintains a website for that purpose (www.careerhelp.org.za), the website proposed in (iii) to (v) is intended to focus only on the maritime transport and maritime transport services industries with the specific purpose of promoting their development. It would thus supplement the SAQA website and should be incorporated as a more detailed link. Similarly, the proposals described in (i) to (viii) should not be regarded as supplanting any of the tasks of the Transport SETA (TETA). The maritime chamber of TETA is concerned mainly with fishing and ports, which have not been included in the brief for this study, but the Freight Forwarding Chamber does include skills development in ship broking and importing and exporting in the ambit of its tasks. As ship owning and ship chartering by importers and exports is perceived to exclude freight forwarding there might be a conflict between the intended purpose of items (vii) and (viii) and the business of freight forwarding.

xi. Diploma courses in coaching and mentoring at various levels are currently offered at several University Business Schools in South Africa and the prospect should be explored of adapting a course specifically for senior managers in the shipping business. The course should be marketed to attract managers from overseas of ship operators trading to South Africa, with the intention that they take on South African trainees sponsored through local bursaries.

The main purpose of the proposals in this section is to reverse the reliance of South Africa on foreign shipping for its extensive physical sea trade and to promote national participation in the supply of the shipping in all its facets. As emphasized repeatedly in this report, such participation does not imply the emergence of a fleet of nationally-owned and -flagged ships, but rather business ventures in the links of the value chain involved in the production of shipping, including the finance, ownership, demise chartering, management and operation of the ships, which can be undertaken more readily but require the knowledge and experience to do so – knowledge and experience that can be gained through education, training, coaching and mentoring. Without the motivation stemming from a local demand for the attributes required of shipping entrepreneurs, few South Africans are likely pursue their attainment in order to venture into the international shipping business[4].

The proposals outlined, if implemented, will take some time to bear fruit in the way of job creation. It also needs to be borne in mind that the demand for bulk shipping depends on the demand for commodities, which independently determines the fortunes of the suppliers of the shipping needed. But, whereas more business ventures in South Africa in the supply of shipping would add to employment irrespective of the state of the market because they comprise an industry that hardly still exists in South Africa, cargo and other services ancillary to the actual supply of shipping are indirectly dependent on market conditions with little or no scope to create employment when trade declines. This latter statement needs to be qualified to the extent that savings in supply chain costs can be achieved through proficiency in the economics of the construction of the chains and through their organisation and management. Such savings reduce the costs of trade and promote economic growth and indirectly lead to job creation. Unfortunately, that is not happening according to the 7th Annual State of Logistics Survey for South Africa 2010, although the difficulty of constructing efficient international container supply chains with integrated links through the ports of South Africa seems to be an intractable problem at present because of the conflicting interests of the link providers, i.e. pursuit of the profitable exploitation of each link, rather than the efficiency of the entire supply chain of integrated links, as, for example, the supply chains of liner companies that comprise road, rail and sea transport, as well as the terminals at the interfaces between the transport modes.

[4] To which the author can testify.

4.13 Subsidization of national shipping

A topic that was not included in the brief for this study and has not been dealt with specifically, is the subsidization of national shipping, which includes flag discrimination and cargo reservation. It should not be necessary any more to recite all the findings against subsidization or to point out that it has never been shown to yield net benefits for an economy, but as the plea for subsidies is a recurrent theme of aspirant South African ship owners, the main objections are summarized as follows:

i. The contention that a national fleet of merchant ships has special features that justify subsidization was dispelled by the Rochdale Committee of Inquiry into Shipping in the United Kingdom in 1970 at a time when British shipping was facing demise as an outcome of competition and out-flagging. Investigation by the Committee established that shipping is no different to any other industry and that its claim to have unique strategic value in economic development could not be substantiated.

ii. Shipping is a highly capital-intensive industry and is becoming more so with the automation of ships and reduction in the numbers of crew required with every new ship-building programme. Few jobs are created by a national shipping enterprise in sea transport and the subsidization needed is likely to be far more job-creative in other industries.

iii. Many countries, including Canada and Australia (apart from South Africa), rely on foreign shipping for most of their imports and exports and do not consider it economically or strategically worthwhile or feasible to establish a national shipping fleet through subvention, especially as the alternative application of the amounts needed to achieve comparative advantage in the market can and do afford greater economic benefits elsewhere. South Africa has for many years benefited from efficient shipping services at competitively low rates to which much its economic growth can be attributed. Even during the period when trade sanctions were formally instituted against South Africa, South Africa was well served with competitive shipping. Although recognition by the Government of conference shipping through the Ocean Freight Agreement resulted in (virtually) administered pricing of some freight for many years, non-conference shipping at competitive rates was always available, notwithstanding strict enforcement of loyalty rebates by the Conference.

iv. Subsidies for national shipping have been the topic of research by academic and government institutions and international bodies for many years and the universal conclusion is that they distort markets, raise shipping costs and reduce economic output, and should be eliminated[5]. Yet many countries still afford subsidies ranging from public training of seafarers through many varieties of subvention to outright operating subsidies, although the latter are now rare except for short sea shipping serving as public transport in archipelagic countries. A tonnage tax that is set at a low rate to attract national shipping is an indirect subsidy. Investigation of the circumstances in which subsidization in whatever form has been forthcoming in other

[5] Well described in the following conclusions of a study by the American Academy of Political and Social Science, *Going against the tide,1997: "*A long-standing combination of operating and construction subsidies, antitrust immunity, and reserved cargo has shielded the U.S. merchant marine from market forces. This protection has meant higher costs for shipping goods in the coastal trades and higher costs for shipping government-impelled cargoes. Government-enforced cartel agreements maintain rates above market levels. These policies are responsible, at least in part, for the steady decline of the U.S. fleet. The rationale for these policies is based on faulty economic reasoning. Even the apparently strongest rationale, the need for the U.S. merchant marine in the event of war, does not provide support for current policies. We conclude that a change in course is imperative. We recommend an end to economic regulation, cargo preference, and operating and construction subsidies. The result would be a more efficient merchant marine." Many other studies have reached the same conclusion, but the defence lobby in the USA is all powerful.

countries shows hardly any parallel examples. Each country has unique circumstances that need to be taken into account. For example, cargo ships built for owners in the USA are equipped at government expense for ready conversion to armed merchantmen in times of war, enabling the owners to compete in the market with faster ships requiring less maintenance, while Chinese shipping is regarded as subsidized by advocates of free markets although that can hardly be established when production in the economy is centrally planned. Many subsidies apply to domestic sea transport in order to ensure that communities do not become alienated from the main business and administrative centres of a country. Few, if any, parallels exist between countries and the merits of public support for shipping need to be evaluated in a national context[6].

v. In accordance with South Africa's maritime policy and the practice of the National Ports Authority, South African ports are open to all shipping, usually on a first-come-first served basis, subject only to safety precautions imposed by Port Captains and SAMSA. Ships may be afforded berthing priority in special circumstances, but that is not regarded as flag discrimination. Flag discrimination implies that ships on the register of a specific country – usually the home country – are given priority in the allocation of berths. As there are no commercial ships on the South African Ship Register, flag discrimination in South African ports for nationally-flagged ships is currently not practical and it would a retrograde step in the development of South Africa's trade to let it become an issue. Furthermore, it is unlikely that South Africa could afford to discriminate in favour of nationally-flagged or ships flagged in another country, for both commercial and diplomatic reasons, even if South Africa participates in trade blocs that support flag discrimination measures, as the cost of retaliation for South Africa could be severe. With the chronic congestion in the Port of Durban and application at times of a congestion surcharge by the liner companies and the resort to bypassing, as at present, flag discrimination would surely incense ship operators and invoke further measures detrimental to trade.

vi. Not many countries indulge in cargo reservation for national ships trading internationally. It is difficult and expensive to enforce and conducive to fraud and corruption. The UNCTAD Code of Conduct for Liner Conferences, which was ratified in 1983 is a form of cargo reservation intended to promote the sharing of cargo between the shipping of developing countries, developed nations and cross-traders in the ratio of 40: 40: 20, although in practice most bilateral trade contracts provided for 50:50 bilateral sharing. South Africa never ratified the UNCTAD Code, which did not succeed in its purpose, and with the concentration of the supply of liner shipping in a few companies and the global alliances in which they participate, it cannot now be implemented. Cargo reservation for bulk imports and exports would be difficult to implement in South Africa because of the limited amount of cargo to reserve, while bulk exports are usually sold f.o.b and imports purchased c.i.f. Importers and exporters would first have to be induced to change their terms of trade, which would no doubt have cost penalties. Assuming that to be possible, as discussed in Part 1, it is difficult to envisage how cargo reservation could be implemented at present, i.e. which should come first, cargo reservation or nationally-flagged ships (with cost penalties either way) as the advent of both simultaneously is hardly feasible. As an importer of petroleum in

[6] Protectionism for shipping, including subsidies, fiscal regimes, cargo reservation, flag discrimination, cabotage restrictions and other interventions were extensively investigated for the purposes of the Report of the Committee of Inquiry into a National Maritime Policy for South Africa in 1993 and on-going research on the topic since then has been taken into account when preparing this section.

bulk, the Government could require that cargo to be carried in ships beneficially owned in South Africa, which is tantamount to cargo reservation, - this topic is not pursued as it involves issues outside the terms of reference for this study.

vii. Flag discrimination and cargo reservation are forms of protection from competition that promote monopolization and are akin to subsidization, with the effect of redistributing income, derived through monopolistic profits, from the public that otherwise would benefit from competitive shipping rates to ship owners and operators (to the detriment of the economy). Such measures could be subject the terms of the Competition Act 89/1998.

viii. Although national shipping has no special strategic attributes that warrant its priority over other industries, it could lay claim to subsidies as an infant industry. However, it needs to be borne in mind that Safmarine was conceived as an infant industry with the support of the IDC in 1948 and flourished under the protection afforded by the formal trade sanctions against South Africa during the policy of apartheid by the then regime. With the change in government and the uplifting of sanctions, Safmarine had little prospect of surviving the rigor of competition in the free market of international shipping without being absorbed by a global carrier, and that soon happened. Without comparative cost advantages in the market, it is unlikely that any new national shipping enterprise would succeed in outgrowing its infancy if subsidized from birth. If South African national shipping is to succeed in the market, it should do so without subsidies or measures tantamount to subvention.

ix. As Indian shipping, which functions under an extensive range of protective measures, is frequently quoted as an example of national shipping for South Africa, some comment on its success is needed. The government-owned Shipping Corporation of India, with some private shareholding, is the country's largest shipping line, operating 75 ships, carrying mainly its oil and gas cargoes as the preferred operator. The corporation has yielded low returns with negative growth for several years. Overall India's fleet now carries about 12% of the countries imports and exports as against more than 40% thirty years ago. Although cabotage restrictions apply to India's extensive coastal trade, which is supported by a national warehousing scheme, the Indian Government has not been willing to institute cargo reservation of foreign imports and exports on the grounds that retaliation by India's trading partners would be to its detriment. India's shipping companies have generally been hard-hit by the recent down turn in world trade and have sought greater protection through cargo reservation.

4.14 Conclusions

In a report of this nature that deals with a variety of topics with widely divergent features and involving different economic principles and applications, there can be no overall conclusions. Each topic could be considered only in context and the conclusions derived accordingly.

The focus of the report is on shipping in the sense of maritime transport and on several issues stemming from shipping. Maritime topics not specifically dealt with include ports and marine services, cargo handling, marine safety and security, port state control, navigation facilities, search and rescue services at sea, maritime communications, hydrography, salvage, maritime supply chains, customs control at seaports and other lesser issues such as ship chandelling and offshore supply. Another topic not considered, but that needs special mention is the market for cruising, which could be developed as an export industry (i.e for the export of inland tours, tourist services and souvenirs) to create far more jobs in South Africa than any other branch of the maritime industry. For example, the three commercial ports of the Eastern Cape Province and the potential eco-tourism in their nearby hinterland provide unique scope for development that could exploit the cruise market and create very many jobs requiring an extensive range of skills. Such development requires insight of the complex economics and logistics that drive the business of cruise shipping, rather than merely the provision of tourist attractions. Cruise ships now in service can accommodate thousands of passenger (more than 8 000 passengers and crew on the largest ship) and the combinations of port and tourist attractions that can cope with volumes of such size are few, especially as cruise operators in the market for mass tourism prefer destinations that enable quick sightseeing trips, in order to maximise the time on board for spending and gambling. Nevertheless, bi-monthly visits by a medium size cruise liner to any of those ports could generate foreign earnings of more than R50 million annually and semi-skilled employment equivalent to 5000 jobs.

Although no overall conclusions can be drawn in this study, brief indications of some of the recommendations in the report are contained in Figure 4.3. However, the relevant sections in the report need to be read in order to appreciate how they have been reached and to ascertain the full proposals.

Table 4.3: Brief review of recommendations for policy on popular proposals to promote development the maritime industry

Proposal	Recommendation
Amend SA Ship Register	No important amendments necessary
Introduce tonnage tax	As soon as possible – 10 years overdue
Amend Admiralty Jurisdiction Regulation Act	Amend – 15 years overdue
Open SA Ship Register	Inappropriate for South Africa – will have detrimental consequences – not recommended
Provide second ship register	Will serve no purpose – not recommended
Negotiate flexibility in seafarer remuneration with unions	Recommended, but unlikely to succeed
Institute HIV testing for seafarers	No recommendation – unlikely to gain acceptance – a personal matter
Subsidise national shipping	Not recommended – no justification
Institute flag discrimination in ports	Not recommended – retrograde step with severe retaliatory consequences
Institute cargo reservation	Not recommended – expensive, impractical, counter-productive and conducive to fraud and corruption
Restrict cabotage	Not recommended – likely to be counter-productive
Allow and provide concessions for coastal shipping	Recommended
Base port charges for coastal shipping on cost	Recommended
Promote development of an international transhipment hub	Concession container terminal at Ngqura to liner company or private operator of international transhipment hubs
Subsidise shipbuilding	Not recommended, as excessive subsidies would be needed
Support for boatbuilding	No recommendation, as boatbuilding is already included in IPAP2
Ship repair	No recommendation while the lease of the drydocks to private enterprise is being negotiated by Transnet
Repair of craft for oil and gas exploration industry	No recommendation – SAGOA in liaison with DTI promotes interests of industry
Shipbreaking	Recommended that South Africa ratify the Hong Kong Convention, 2009. and implement IMO rules and environmental requirements to enable green ship recycling to commence in 2015
Promote IDZ's for import/export processing	Recommendation: construct efficient supply chains to container ports for IDZs at Richard's Bay and East London; couple promotion of processing at Coega IDZ with concession of transhipment hub to liner company or international transhipment hub operator
Improve maritime training	Recommend that education, training, coaching and mentoring in shipping business be sponsored through bursaries for overseas internships; no recommendation for seafarer training in view of SAMSA's programme
Counter offshoring of shipping services to low-cost countries	Recommendations: extend incentives for inward BPO to outward BPO; use government purchasing power to counter outward offshoring

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