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ECONOMIC COMMISSION FOR AFRICA

Multinational Programming and
Operational Centre for Eastern
and Southern Africa (Lusaka)

A MULTINATIONAL COASTAL SHIPPING LINE IN EASTERN AFRICA

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I. INTRODUCTION

1. The idea of a multinational coastal shipping line in Eastern Africa has been under sporadic discussion among the countries of the region for the past ten years. The current consideration derives from the meeting held in Swaziland in April 1976 of the Council of Ministers of the countries of the Lusaka-based ECA Multinational Programming and Operational Centre. The Council observed the serious constraint to intra-African trade posed by inadequate transport infrastructure, and noted the possible role of coastal shipping. The Council then directed the ECA-MOC secretariat to take note of previous and current proposals in the countries of the region and to examine the technical and economic feasibility of a multinational regional shipping line.

2. The present report is the result of a one-man six-week mission in Eastern Africa early in 1977. The mission sought to evaluate the attitude of the different countries to the proposal, to observe the existing status of coastal shipping and proposals for their expansion and to identify the various agencies in the countries both private and public that may be relevant to the implementation of the proposal.

3. The report is divided into four main parts. The first part considers the need for coastal shipping in Eastern Africa. This is a fundamental issue which should be examined carefully as a pre-condition to exploring ways of achieving the objective. The second part analyses the present status of coastal shipping enterprises in the region and current proposals for their expansion. It is noteworthy that considerable extra-national coastal shipping operations exist, and there are proposals currently being considered for joint multinational shipping operation by some countries in the region. The third part outlines the requirements for the establishment of a multinational shipping line and the strategies for the implementation of the project. The report is concluded by a number of recommendations.

II. THE NEED FOR COASTAL SHIPPING IN EASTERN AFRICA

A. THE RELEVANCE OF COASTAL SHIPPING

4. The appeal of coastal shipping, like all maritime transport, is its relatively low unit cost compared to other means of transport: assuming, of course, efficient operational structure and management. Moreover, a coastal shipping service can be introduced more readily than other alternative means of transport, especially rail or road. The capital requirement and the volume of traffic that are needed to sustain the least viable economic unit of operation are smaller compared to the requirement for the construction of a permanent highway or railway.

5. In general, coastal shipping tends to be important in areas or circumstances in which more permanent surface transport cannot be provided. As technology improves, and the economy expands, the relative significance of coastal transport tends to reduce, as road transport, railways and air transport assume greater importance. In such a situation, coastal transport continues to service bulk commodities and locations close to the coastline.

6. It may be necessary to define, at the onset, the operational meaning of the term coastal shipping. Coastal shipping or domestic shipping is commonly distinguished from foreign or deep-sea shipping. In this context, coastal shipping refers to shipping services within a national territory as opposed to those services to other countries. National coastal shipping may also be differentiated from regional or multinational coastal shipping. The latter refers to maritime linkages between adjacent States. When the range of regional shipping becomes extended, in the East African subregion say to the Red Sea and the Persian Gulf, the term cabotage shipping is commonly applied. The concern of this report is thus essentially with regional coastal shipping in Eastern Africa.

7. The geographical situation of Eastern Africa approximates to the ideal circumstances in which coastal shipping has an intrinsic relevance. 1/ In the first place, there are a number of off-shore islands. Water transport is the only feasible surface means of transport in archipelagoes and island situations; and in Eastern Africa, shipping is crucial for linking islands like Zanzibar, Pemba, Comoros, Réunion, Mauritius, Seychelles and Madagascar with themselves and the mainland. Secondly, coastal shipping has an immediate place in countries with long, and sometimes rugged, coastlines and where coastal overland transport is difficult. 2/ In Eastern Africa, sailing distance between Mogadiscio and Maputo is as much as 2,000 nautical miles (3,700 km), and in the cabotage range, Suez is 2,952 nautical miles (5,460 km) from Mombasa (table 1).

Table 1: East African cabotage shipping (distances from Mombasa in nautical miles)

<u>Ports</u>	<u>Distance</u>	<u>Ports</u>	<u>Distance</u>
<u>East Africa</u>		<u>Red Sea</u>	
Maputo	1,501	Suez	2,952
Beira	1,149	Aqaba	2,842
Mtwara	370	Port Sudan	2,253
Dar es Salaam	180	Jeddah	2,296
Zanzibar	139	Massawa	1,995
Tanga	78	Djibouti	1,740
Mogadiscio	500	Hodeidah	1,700
		Aden	1,615
<u>Indian Ocean</u>		<u>Persian Gulf</u>	
Seychelles	969	Bahrein	2,643
Mauritius	1,445	Abadan	2,848
Réunion	1,410	Basrah	2,879
Majuga	807		

1/ United Nations Department of Economic and Social Affairs, Coastal shipping, feeder and ferry services, New York, 1970, p.5.

2/ In Norway, for example, coastal shipping accounts for 35 per cent of total national ton-miles in the transport sector: B. Foss, "A cost model for coastal shipping", Journal of Transport Economics and Policy, May 1969, pp.195-196.

8. The present standard of surface transport in Eastern Africa makes lateral coastal shipping the more relevant in the area. The three big railway systems in the region are not integrated. In the southern part, the railways of Malawi, Swaziland and Zambia are part of the large South African and Rhodesian interconnected network which includes Zaire and Angola and has a gauge of 1,067 mm. In the north, the railways of Sudan have the same gauge of 1,067 mm, but in between is the large network of Tanzania, Kenya and Uganda with a gauge of 1,000 mm. In addition to these three systems, the Franco-Ethiopian railway is of the 1,000 mm gauge, and there is a second separate Ethiopian line with a gauge of 950 mm. 1/

9. More integrated long-distance transport is likely to be achieved through the trans-African highway projects. A trans-East African route is projected from Cairo to Gaborone; 53 per cent of its total length of 9,027 km is bitumen surfaced. 2/ When this route is available, it will afford an important means of inter-country transport in the region. Road transport, however, has disadvantages compared to shipping, over long distances. Moreover, because of the interior alignment of the route, more peripheral roads or shipping may be more appropriate to link coastal locations.

10. The more serious threat to the long-term relevance of coastal shipping is the improvement of coastal lateral roads. It is proposed, for example, to bridge the Rufigi river in Tanzania and provide a permanent and direct road link between Dar es Salaam and Mtwara. The high cost of such an infrastructure was the justification for the introduction of a coastal shipping service. It has also been decided to build a Unity Bridge over the Ruvuma, the river that borders Tanzania and Mozambique, and thereby provide a permanent surface link between the two countries. Such road improvements could influence the viability of local coastal shipping, they are unlikely to drastically reduce a sustained need for long-distance regional and cabotage shipping. These road projects, again, may not be available in the immediate future in light of their high costs of construction.

11. The profitability and relevance of coastal shipping has two time dimensions. The first period is when surface transport is underdeveloped and it cannot offer a serious alternative to shipping for long-distance interregional movement. The second phase is when the provision of surface routes results in competition with water transport. In the first time horizon, when shipping has a position close to monopoly, it plays an important role of stimulating intra-regional trade. It is possible to amortize well-planned investment in shipping even in this period. When long-distance surface transport becomes available, the overall role of coastal shipping could shrink but it may continue to be important if intra-regional trade builds up and there is linked development in the countries. Moreover, shipping has demonstrated a relative advantage for heavy bulk raw materials, especially the inputs for coastal industries.

1/ Railways in Africa: Statistical survey, document E/CN.14/TRANS/103, 29 January 1974, p. 13.

2/ Report on the current status of Trans-African Highway Network, document E/CN.14/662, 14 December 1976, p.4.

12. Under competition, the relative significance of coastal shipping will depend on the type of traffic available and the proximity to the coast of the origins and destinations of movement. It has to be supplemented by some overland movement between the inland origins/destinations and the loading and discharging ports. The total cost of moving a commodity from one inland location to another through coastal shipping has three components: the costs of overland transport from inland origin to port of loading; the shipping link between ports of embarkation and disembarkation; and the surface transport from the port of discharge to the ultimate inland destination. The sum of these three components must be less than the one-component cost of direct surface movement to make coastal shipping attractive. Coastal shipping becomes the more competitive, the nearer the coast the origins and destinations of movement are such that cost of supplementing overland movement is reduced.

13. A factor in the long-term relevance of shipping in the region is the continued importance of the coastal area, which has been the focus of colonial development. Although there are attempts to shift the axis of growth in many countries from the coast to the interior, the seaboard retains an advantage for some types of industries which can continue to generate sustained traffic for shipping.

B. THE DEMAND FOR COASTAL SHIPPING

14. The profitability and scale of operation of a shipping service will depend on the characteristics of the demand for transport, especially the volume, types, seasonality and balance in flows. No penetrating study has been carried out of the existing or potential coastal commodity movements in Eastern Africa. The brief visits to the countries for the preparation of this report was not intended to achieve such a demand analysis which needs more time and team work. Visits were not made to the islands and it was not possible to learn at first hand the condition of their traffic. No attempt is made here to forecast future traffic, which could be an elaborate exercise if the results are to be worth while. Such traffic projection will draw on the details of the present pattern of movement, the intra-regional traffic components of prospective development in the countries and on movement that may be induced by the provision of a low-cost regular transport service. The intention of this section is to put forward the available limited information on traffic as a prelude to the needed market research and forecasting that must be one of the major phases of the implementation of the project.

15. Three types of traffic can move in coastal shipping:

- (a) Passengers;
- (b) Transshipments;
- (c) Domestic trade between the countries.

(a) Passengers

16. Passenger traffic in the region may consist of two types: tourist traffic and local traffic. Tourism is important in some of the countries of the region, and the provision of cruising ships may be a line of expansion of tourist activity. There could be substantial local passenger traffic between the islands and the mainland, as well as along the coast.

Table 2: Passenger movement between Tanzanian ports

Port	1974		1975	
	IN	OUT	IN	OUT
Dar es Salaam	7,823	8,049	13,258	15,373
Mafia	2,347	2,869	2,340	2,336
Kilwa	1,589	1,137	1,650	1,535
Lindi	1,672	1,613	3,235	3,827
Mtwara	4,538	4,301	9,836	7,248
Total	17,968		30,913	

Source: TCSL, Dar es Salaam.

17. Table 2 shows the passenger traffic of the Tanzania Coastal Shipping Line which carried 15,600 people in 1973, 17,968 in 1974 and 30,913 in 1975. The role of shipping is subject to greater competition from the other modes in the passenger sector than for commodities. The expansion of regional shipping should place emphasis on the cargo traffic sector.

(b) Transshipments

18. Transshipments are part of the cargoes of deep-sea trade routed through an intermediate port from or to the final destination. There is transshipment when cargo is small, or the port has poor facilities or it is congested. Traffic of the off-shore islands are reloaded commonly at mainland ports in East Africa. Part of Somali trade through Mogadiscio used to be transshipped at Mombasa. Mogadiscio is a lighterage port, and access to it is difficult in the monsoon season; but an impressive project, to be completed late in 1977, will create a harbour for ocean-going ships. Such port improvement could cause a decrease in transshipment in the region. On the other hand, the adoption of unitized shipping technology is likely to concentrate deep-sea traffic in a few equipped ports and generate feeder services.

19. The two main centres of transshipment in the region are Mombasa and Dar es Salaam. Table 3 gives the tonnages of transshipments at these ports.

Table 3: Transshipments at Mombasa and Dar es Salaam (in '000 metric tons)

Years	Mombasa	Dar es Salaam
1959	19.8	16
1960	28.5	13
1961	22.4	15
1962	40.5	12
1963	36.7	11
1964	38.1	18
1965	42.8	17
1966	30.3	13
1967	25.7	17
1968	35.9	13
1969	29.6	17
1970	35.3	7
1971	27.8	9
1972	30.4	2
1973	25.0	2
1974	n.a.	4
1975	21.5	3

Source: EAHC Annual Reports and Accounts.

Three important features of this table are the more prominent role of Mombasa as a transshipment centre, the decline of transshipped traffic at both ports, and the rather pronounced fall in traffic at Dar es Salaam.

20. Mombasa's greater role in transshipments is due to its overall status as the largest of the ports of the East African Harbours Corporation, in terms of both facilities and traffic. It is also the best served in respect of variety and frequency of shipping connexions. Both ports have actively discouraged transshipments in the last few years as a result of congestion; and preference had to be given to domestic and transit traffic to land-locked States.

21. Dar es Salaam was under greater pressure as a result of the rapid growth in Zambian transit traffic, and the port had to impose a limit of 20 tons of transshipment per ship call. Facilities in the two ports have been expanded recently, and it can be hoped that the ports can again encourage transshipments.

Table 4: Transshipments at Tanga and Mtwara in metric tons

Years	Tanga	Mtwara
1969	440	1,136
1970	3,204	8
1971	4,142	9,508
1972	2,552	1,186
1973	1,096	22
1974	196	1,963

Source: EAHC Annual Reports and Accounts, 1969-1974.

Table 4 gives the available data on transshipments at Tanzania's two main ports other than Dar es Salaam and demonstrates their relative insignificance compared to the two major terminal ports.

22. The figures in tables 3 and 4 are not detailed enough for planning. Further to the monthly disaggregation of total traffic, as is provided in table 5 for Mombasa's transshipped traffic in 1967 and 1975, further information is required on the commodities making up these totals and on the origins and destinations of the flows.

Table 5: Transshipments at Mombasa: Monthly tonnages

Months	1967	1975
January	1,749	1,075
February	3,190	3,915
March	1,216	1,312
April	2,099	1,287
May	2,378	942
June	1,389	7,750
July	2,871	820
August	3,144	1,921
September	1,713	559
October	1,902	1,185
November	2,466	364
December	1,548	367
Total	25,665	21,497

Source: Port of Mombasa Blue Book.

(c) Regional traffic

23. Domestic coastal traffic is derived from the intra-regional trade between the countries and consists of agriculture, mineral and industrial products. The volume of domestic traffic is determined by the extent of complementarity of the economies and how far inter-State exchanges are facilitated.

24. Some idea of potential coastal shipping can be gained from a study of inter-State trade. This approach can only indicate what could move by coastal shipping, and not what really moves. Moreover, it is not all of intra-regional trade that need be taken into account in the search for potential coastal traffic. Coastal shipping is not relevant to movement between East African land-locked States and their immediate neighbours, for example, between Zambia and Tanzania, Malawi and Tanzania, Malawi and Tanzania, Malawi and Mozambique, Zambia and Mozambique and Uganda and Kenya. There could be coastal movements, however, between land-locked States and distant coastal or inland countries depending on their situation. Some Zambian traffic, for example, could move coastwise to Kenya, Somalia or

Ethiopia. Trade between adjacent maritime countries with large land border will tend to be conducted more by land but coastal traffic may be significant for such countries when their coastlines are long or when lateral surface transport is not well developed. Coastal traffic can thus be expected between Kenya and Tanzania, Kenya and Somalia, Kenya and Ethiopia, Kenya and Sudan; and Tanzania and Mozambique.

25. The following fifteen pairs of countries are relevant to an analysis of the likely traffic that can move by coastal shipping north to south in Eastern Africa in the Djibouti-Maputo range: Ethiopia-Kenya, Ethiopia-Zambia, Ethiopia-Malawi, Ethiopia-Tanzania, Ethiopia-Mozambique, Somalia-Kenya, Somalia-Zambia, Somalia-Malawi, Somalia-Tanzania, Somalia-Mozambique, Kenya-Zambia, Kenya-Malawi, Kenya-Tanzania, Kenya-Mozambique, Tanzania-Mozambique. Quite obviously it is not all of the movement between these countries that can be attracted to a shipping service. Several parameters of the cargoes must be known to evaluate the likelihood of movement by sea: especially its value to weight ratio, and the location of the origins and destinations in relation to the coast or to alternative surface transport.

26. Kenya, at present, generates most of the intra-regional trade in the region. Mozambique would be another focus of regional trade and coastal traffic as the economy is rebuilt. Tanzania and Somalia can also participate profitably in regional trade. What is needed is a greater commitment on the part of all countries to substitute local sources of supply, as much as possible, for their external imports; and dismantle existing impediments to regional trade. 1/

27. Tanzania and Mozambique are taking steps to stimulate trade between each other. Tanzania has signed for 60,000 tons of cement per year for the next five years and Mozambique could take large quantities of meat and of gypsum from Tanzania if the latter is crushed to make it easily loadable; 50,000 to 80,000 tons of coal were shipped from Maputo to Mombasa for the cement industry in Kenya. Somali imports from Kenya in 1974 were 22,756 tons, valued at 43 million Somali shillings and exports were 1,113 tons worth 3 million Somali shillings. 2/ According to an official source, Mozambique exported 1,000 tons of sugar to Somalia in 1976.

28. An important traffic in cabotage and regional shipping is bulk petroleum. Crude oil is moved from the Middle East to feed the refineries of the region and refined products are distributed to small ports in parcel tankers. There are refineries at present at Maputo, Dar es Salaam, Ndola, Mombasa and one projected for Mogadiscio. 3/ The annual crude input into these plants is of the order of 5 million tons a year which is adequate to sustain a tanker service.

1/ Intra-subregional trade: Eastern and Southern Africa, document ECA/UNDAT/Lusaka/34, March 1976.

2/ Somali Republic, Foreign Trade Returns 1974, Mogadiscio, 1975.

3/ Development of petroleum refineries in Africa: Present status and prospects, document E/CN.14/NRSTD/E/7, 3 February 1976.

29. The actual volume of inter-country commodity movement by sea is best measured by analysing the maritime origins and destinations of the traffic through the ports of the region. Such an analysis can clearly separate short-sea movements from deep-sea traffic. Such information is not at present available for the ports of Eastern Africa. It was learnt, however, that the Intergovernmental Standing Committee on Shipping (ISCOS), based in Mombasa, has begun such a project. The result of the study would be useful to future analysis of shipping in the region.

30. The overall impression gained through contacts in the region is that regional shipments have decreased in the last few years especially at Mombasa, and also at Dar es Salaam. The main reasons are lack of suitable port facilities for coastal traffic, port congestion, and increase in port charges. These problems have led to the discontinuation of some services.

Table 6: Coastal traffic at Kilindini Wharf, Mombasa

Year	Import	Export	Total
1969	965	53,344	54,309
1970	1,259	52,604	53,863
1971	11,404	35,723	47,127
1972	5,924	20,995	26,919
1973	10,094	18,996	29,090

Source: EAHC, Monthly Review of Port Working.

31. At Mombasa, coastal shipments handled at the main port (Kilindini wharf) declined from 54,309 tons in 1969 to 29,090 tons in 1973 (table 6). Coastal traffic at the Mombasa old port, which is carried by small crafts, has fallen less drastically (table 7).

Table 7: Traffic at old Port Mombasa

Year	Import	Export	Total
1968	12,022	18,062	30,084
1969	3,382	16,736	20,118
1970	4,857	14,392	19,249
1971	7,440	29,496	36,940
1972	5,181	13,055	18,236
1973	6,023	13,620	19,643
1974	5,051	23,262	28,313
1975	2,501	22,205	24,706

Source: Port of Mombasa Blue Book.

32. At the Tanzanian ports of Dar es Salaam and Tanga, regional coastal traffic handled at the main wharfs has fallen (table 8). Coastal traffic within Tanzania, on the other hand, grew immediately following the introduction of the Tanzania Coastal Shipping Line. The fall in traffic as between

Table 8: Regional coastal traffic at Dar es Salaam and Tanga

Years	Dar es Salaam			Tanga		
	Import	Export	Total	Import	Export	Total
1969	2,047	13,647	15,694	2,930	4,283	7,213
1970	3,550	12,506	16,056	1,961	2,128	4,089
1971	7,173	11,241	18,414	1,881	1,061	2,942
1972	692	7,997	8,689	1,224	1,845	3,069
1973	1,179	6,070	7,249	-	1,024	1,024

Source: EAHC, Monthly Report of Port Working.

1974 and 1975 was primarily due to the policy of local self-reliance which has reduced the need for the movement of foodstuffs to the southern part of the country (table 9).

Table 9: Traffic of the TCSL, by ports

Ports	1974			1975		
	Import	Export	Total	Import	Export	Total
Dar es Salaam	36,215	76,959	113,174	38,172	58,514	96,686
Mafia	1,832	2,584	4,416	620	604	1,224
Kilwa	2,162	1,394	3,556	1,910	1,192	3,102
Lindi	7,515	1,648	9,163	2,661	1,347	4,010
Mtwara	61,279	32,446	93,725	50,549	33,913	84,462
Tanga	1,663	1,407	3,070	807	550	1,357
Zanzibar	6,099	2,235	8,334	5,884	1,788	7,672
Pemba	3,836	-	3,836	3,285	-	3,285
Mombasa	143	2,448	2,591	292	6,468	6,760
Others	377	-	377	198	-	198
Total	121,121	121,121	242,242	104,378	104,378	208,756

Source: TCSL, Dar es Salaam.

33. Figures of coastal movements according to ports in Mozambique are available for 60 per cent of the total coastal traffic of the country (table 10). This was the fraction handled by the larger of the two coastal operators in the country. The three main ports of the country, Maputo, Beira and Nacala, are according to their order of importance in external trade, the leading ports for coastal traffic, accounting for 66 per cent of cargoes loaded and unloaded in 1975. Coastal shipping is important within Mozambique on account of the long coastline of the country and also because inland transport facilities are not completely integrated from north to south. The commodities carried are a range of agricultural exports southwards to Beira and Maputo and general cargo goods from the main ports to the subsidiary ones.

Table 10: Coastal traffic in Mozambique in 1975, by ports

Ports	Loaded	%	Unloaded	%	Total	%
Maputo	18,384	27.4	18,513	30.0	36,897	28.7
Beira	11,194	16.7	14,602	23.7	25,796	20.1
Quelimane	5,803	8.7	4,920	8.0	10,723	8.3
Macuse	2,807	4.2	117	0.2	2,923	2.3
Pebane	7,000	10.4	675	1.1	7,673	6.0
Moma	1,113	1.7	91	0.1	1,204	0.9
Angoche	5,997	8.9	3,591	5.8	9,588	7.4
Mocambique	-	-	507	0.8	507	0.4
Nacala	8,249	12.3	13,498	21.9	21,747	16.9
Pemba	4,079	6.1	4,736	7.7	8,815	6.8
Ibo	-	-	-	-	-	-
Mocimboa da Praia	826	1.2	377	0.7	1,203	0.9
Dar es Salaam	630	0.9	-	-	630	0.5
Mtwara	998	1.5	-	-	998	0.8
Total	67,077	100.0	61,626	100.0	128,703	100.0

Source: Empresa do Limpopo, Maputo.

III. THE PRESENT STATUS OF COASTAL SHIPPING

34. Eastern Africa, like the rest of the continent, is served predominantly by deep-sea shipping enterprises organized in conferences which link the region with the outside world. Coastal shipping which should promote interchange between the countries has been relatively neglected. This situation is a dimension of colonial transport development which on land was manifested in national routes perpendicular to the coast with little lateral interconnexions. Colonial transport was an instrument of dependent economic development which vertically integrated enclave production in Africa with the metropolitan countries such that there was little or no need for regional connexions, by land or sea. The long-distance shipping services occasionally picked cargoes in the cabotage range which was serviced, by default, mainly by non-mechanized shipping. Tramps, irregular cabotage operators and a few formal coastal enterprises have emerged more recently.

(a) The dhows and schooners

35. Dhows have, for many centuries, provided the vehicles of transport linking parts of Eastern Africa with each other, with the off-shore islands, and places farther afield like the Red Sea, the Persian Gulf and India. These unmotorized craft could be as large as 300 tons, but the majority are between 150 and 200 tons, and some are even smaller. The dhows have been on the decline, and have been replaced by schooners, small coasters with engines.

36. Mombasa is the centre of the dhow traffic in Eastern Africa, and table 11 gives the number of dhows calling at the port in recent years; and in 1975, a total of 24,706 tons of traffic were handled at the Mombasa old port carried by dhows and schooners.

Table 11: Dhows calling at Mombasa

Year	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
No. of vessels	43	43	34	41	58	59	58	85	30	45

Source: Port of Mombasa.

The Amphees Shipping Agency at Mombasa is a specialized agency for these small craft and at present manages six ships ranging from 40 tons to 300 tons which operate along the coast and to the islands. Sailings are arranged according to availability of cargo, but there are usually up to three or four sailings a week to Pemba and Zanzibar and about once a week to Dar es Salaam from Mombasa.

37. In Tanzania, the surviving schooners have been brought under the control of the Tanzania Coastal Shipping Line (TCSL) which has exclusive right to all coastal traffic in the country. The TCSL allocates cargo to the schooners as appropriate but their private owners are responsible for operation and maintenance. There are at present 11 private schooners that operate under the TCSL with deadweight tonnages between 100 and 275 tons. The schooners carried 30 per cent of the traffic of the TCSL in 1974 and 23 per cent in 1975. It can be observed from table 12 that the schooners are deployed mainly to the small ports like Mafia, Kilwa, Lindi and Pemba that are rather inaccessible to the large coasters. The trend is that these small craft will decrease in significance, especially at the present poor ports, are improved.

Table 12: Tanzanian coastal traffic by type of carrier and ports, 1975

Ports	Inward traffic			Outward traffic		
	Schooners	Ships	Total	Schooners	Ships	Total
Dar es Salaam	7,250	30,922	38,172	10,497	48,017	58,514
Mafia	620	-	620	604	-	604
Kilwa	1,910	-	1,910	43	1,149	1,192
Lindi	2,614	47	2,661	1,349	-	1,349
Mtwara	1,683	48,866	50,549	3,343	30,570	33,913
Tanga	807	-	807	-	550	550
Zanzibar	5,334	550	5,884	1,788	-	1,788
Pemba	3,285	-	3,285	-	-	-
Mombasa	39	253	292	5,918	550	6,468
Others	-	198	198	-	-	-
Total	23,542	80,836	104,378	23,542	80,836	104,378

Source: TCSL, Dar es Salaam.

38. Information was not immediately available on the status of these informal operators in Mozambique and Somalia, but the general impression is that they are relatively unimportant for inter-State movements.

(b) Tramp service

39. These consist of modern conventional break-bulk ships, but they do not offer guaranteed services in the coastal range. The tramps operate on charter or irregularly as traffic is available. Two Russian tramps are reported to have been operating along the East African coast in the last two years. They are said to quote much lower rates than other operators. It was not possible during the mission to contact these ships and obtain details of their services. Such tramps can be eliminated by a regular low-priced service, and by applying customer-retention techniques such as special rates and loyalty rebates which are standard practice in conference shipping. External tramping, like all other foreign participation in coastal shipping, can be eliminated by legislation.

40. Bulk cabotage transport of petroleum and cement are undertaken on contract or charter basis by local shipping interests (Southern Line and Bamburi Cement Co.). Other bulk transport of coal from Maputo to Mombasa and mangrove poles from Lamu to the Persian Gulf are handled largely on trip chartered ships. 1/

(c) The East Coast Conference

41. Members of the East Coast Conference Lines interested in cargo rights in wayside ports constitute the East Coast Conference. The Conference is designed to regulate services and rates in the coastal and cabotage range in Eastern Africa and the Red Sea area. The parent body, the East African Conference, is the most important shipping institution in East Africa and it controls 40 per cent of all the external shipments of the region. It groups the major carriers operating between the region and the United Kingdom, Western Europe, Scandinavia and the Mediterranean; and controls virtually all the shipments on these routes.

42. The East Coast Conference has about 20 line members, but most of them do not function in wayside ports since their ships are better utilized on the long-range service to and from Europe. The cargo for a wayside has to be substantial to make diversion worthwhile, and the ships for the deep-sea services (about 10,000 tons dwt) are not suitable for numerous calls in small ports. Attractive tonnages are available often between Kenya and Egypt but Conference members hardly take such cargoes, mainly of tea, because of payments arrangements imposed by the Egyptian Government: freights are paid in local currency but the Government insists on having canal dues in foreign exchange. Ships of the Conference do not usually go as far as Maputo since the opening of the Suez Canal. In terms of the members of the East Coast Conference it can be said that there is hardly any regular coastal service and whatever they offer is inadequate in terms of periodicity. The only one member of the Conference which is active in the coastal range is

1/ UNDP/UNCTAD. Eastern African Shipping Study, February 1975, p.170.

the Southern Line and this exception is explained by the fact that the company does not engage in the long-distance service to Europe or the Mediterranean but specializes in the coastal and cabotage range. The operation of this company is discussed below.

43. The East African Coast Conference is important to the structure of coastal shipping from one important consideration. It is the freight tariff of the Conference that is applied both by members and non-members for determining freight charges in the region: with the exception of the TCSL that has issued its own simplified tariff. The tariff of the Conference is in three parts for the southern, northern and central sectors of the coast. The southern sector covers ports in East Africa, Mozambique and South Africa, the northern sector consists of ports in East Africa, Somalia and the Red Sea, and the central or domestic sector relates to ports between Lamu and Mtwara.

(d) The non-conference lines

44. There are a number of lines operating outside the conference between East Africa and other destinations which cover the ports in the region as wayside ports. Their services, though better, in terms of availability, than by the conference members cannot be described as adequate nor dependable. There are at present only five of these lines that can be taken as substantial cabotage operators. They are: Deutsche Seereederei Rostock (DSR), Polish Ocean Line, Hellenic Line, Bank Line and Messageries Maritime. The Eastern African Shipping Study provides a longer list of companies that operate over the range but many of these, like members of the East Coast Conference do not, in fact, participate effectively in wayside ports. 1/

45. DSR operates a twice-monthly service from East Africa to northwest Europe calling at Red Sea ports if there is substantial cargo. Polish Ocean Lines offers two sailings monthly from Mtwara, Dar es Salaam, Tanga and Mombasa through to Red Sea ports and the Persian Gulf to Europe. This is a regular service and cargo is usually moved from East Africa to Red Sea ports and the Persian Gulf. Hellenic Line operates two services. The first is southwards from East Africa round the Cape of Good Hope to the United States, east coast and Gulf ports; and some cargo may be moved to Maputo from Mombasa/Dar es Salaam. The second service, northwards, is one sailing a month from Mombasa to Piraeus, Trieste and Venice. Substantial cargo can be accepted on the service for Red Sea ports if the ports are not congested. Bank Line operates two services from Durban through East Africa to the Far East with one or two sailings per month, and from Durban through East Africa to the eastern coast of India with one sailing once in three months. For both services Mombasa is the last port of loading and the ships branch through Madagascar to Singapore. The aspects of their service within which cabotage cargo can be accepted are the links from Maputo to Mombasa and from Mombasa to Madagascar. Messageries Maritime operates between Europe and Madagascar. Consignments for Réunion are discharged at Mauritius and ships return via Mombasa to Europe. Some traffic between the islands and the mainland may be moved on this service.

1/ UNDP/UNCTAD, Eastern African Shipping Study, February 1975, pp.163-164.

(e) The East African-based coastal operators

46. The companies are discussed under their individual countries of ownership or registration.

(i) Kenya

47. Southern Line Limited is the only important coastal carrier operating from Kenya. It is a private company owned by a number of conference lines in Europe. 1/ It was founded in August 1952 with headquarters at Southern House, Mombasa. The Line has a subsidiary, Southern Engineering Company Ltd., which are marine and general engineers and they maintain the fleet of the parent company. Southern Line holds a share of 10 per cent in the Kenya Shipping Agency as a partner with the Kenya Government. The company also held one third of the shares of the Eastern African National Shipping Line (EANS�) in partnership with the Governments of Kenya, Tanzania, Uganda and Zambia. It managed the EANS� from inception in 1966 until November 1973 when the management agreement was terminated and its shareholding bought by the countries. The company maintains agents at the following places indicating its area of interest: Amman, Port Said, Muscat, Hodeidah, Mahe, Dar es Salaam, Tanga, Mtwara, Aden, Khartoum, Djibouti and Addis Ababa.

48. The company owns a fleet of three tankers and two cargo ships (table 13); the newest is ten years old and the oldest is 19 years. The tankers of the company move refined products regularly on the following routes: Dar es Salaam to Tanga, Pemba, Zanzibar via Mtwara; Mombasa to Seychelles; Aden to Seychelles; Aden to North Yemen (Hodeidah); and also make spot voyages to Somalia, Comoros, Réunion when cargo is available. The Line carried 45,271 tons of fuel from Dar es Salaam to other Tanzanian ports in 1975 (table 14).

Table 13: Fleet of Southern Line Ltd., January 1977

Name	Type	When built	DWT
Southern Isle	Cargo ship	1963	2,700
Southern Trader	Cargo ship	1962	1,500
Southern Dawn	Tanker	1958	2,000
Southern Cross	Tanker	1967	1,500
Southern Venture	Tanker	1963	950

Source: Ministry of Power and Communications, Nairobi.

Table 14: Refined petroleum moved by Southern Line tankers from Dar es Salaam

Port of discharge	1975	1976
Tanga	23,187	18,685
Zanzibar	13,504	11,706
Pemba	2,759	2,993
Mtwara	5,821	7,443
Total	45,271	40,827

Source: NASACO, Dar es Salaam.

1/ UNDP/UNCTAD, Eastern African Shipping Study, February 1975, p.380.

The company is not involved in the movement of crude to East African refineries. This is undertaken by the oil companies themselves using larger tankers. The company has a monopoly of the tanker trade for refined products along Eastern Africa, and it cannot at present meet all the demand. There are requests for the movement of fuel to Ethiopia which the company cannot meet.

49. The dry cargo trade is mainly to the Red Sea area with principal ports of call being Suez, Hodeidah, Djibouti and Aden. The company is considering withdrawing its regular trips to Egypt because of payment problems. Most of the Line's trade is said to be 95 per cent one way consisting of exports of Kenyan goods, and the ships come back largely empty. There is also a fair amount of cross trading within the Red Sea area on each voyage before returning to Mombasa. The company operates less regularly to Tanzania, Somalia, Seychelles and other Indian Ocean islands. In 1975 it loaded 6,227 tons of cargo from Dar es Salaam; 5,083 tons for Safaga, 34 tons for Aqaba and 110 tons for Mombasa. Table 15 gives the traffic of the company through the port of Mombasa, but information was obtained only up until 1969.

Table 15: Traffic of Southern Line through port of Mombasa, 1964-1969

Year	Tankers		Dry cargo	
	Import	Export	Import	Export
1964	11	32,056	2,200	26,302
1965	80	30,190	2,252	47,888
1966	182	24,194	4,367	38,066
1967	986	39,133	6,032	33,677
1968	8	28,317	4,126	57,332
1969	143	34,958	3,793	76,024

Source: Port of Mombasa Blue Book; no figures after 1969.

50. The company is planning to restructure and expand its services, to sell off part of the existing fleet and buy new ships of more suitable sizes and types. The company is, for example, considering the purchase of specialized refrigerated vessel to carry chilled meat to the Red Sea and the Gulf. There are also proposals which are being considered to expand into deep-sea services to India and the United States.

51. The company also has a staff training programme to improve the Africanization of the sea-going staff. All the engineers and captains are at present expatriates, but there are 13 engineering cadets and five deck cadets. They are trained at the Mombasa Polytechnic, through correspondence courses, under the Southern Engineering Ltd., on ships and ultimately in Britain for advanced courses leading to final professional examinations.

(ii) Somalia

52. The Somali National Shipping Line (SNSL) is the only national shipping enterprise for deep-sea and cabotage services. It was established in 1972 to enable the country participate in the carriage of its trade, save foreign exchange and build up a cadre of trained manpower for the shipping industry.

53. SNSL owns a fleet of five ships: one livestock carrier, two refrigerated vessels for carrying bananas and two dry cargo vessels (table 16). As at January 1977, the two refrigerated ships were on time charter. The Juba was on charter, to the Somali Banana Board, operating to Italy and the Benadir was hired to the Arabian Agency for Cold Storage, carrying bananas to Jeddah, Kuwait and Iran. The Berbera, which can accommodate 11,000 head of sheep or 2,000 head of cattle, but unsuitable for camel, is kept busy on the run to Arabia. The two dry cargo ships are operated essentially as tramps and deployed as necessary along the domestic coastline, to Kenya, Tanzania, Mozambique, Yemen, Aden and Djibouti to carry tea, cement, sugar and other general cargo that could be available. The full utilization of the ships calls for careful management in order to find cargoes and plan their operations.

Table 16: Fleet of the Somali National Shipping Line, January 1977

Name	Type	When built	DWT
Berbera	Livestock	1948	3,500
Benadir	Refrigerated	1964	7,000
Juba	Refrigerated	1963	7,500
Boolimooog	Dry cargo	1972	1,950
Puntland	Dry cargo	1960	1,390

Source: Somali National Shipping Line, Mogadiscio.

54. It is the policy of the Line to achieve rapid Somalization. One of the ships, the Boolimooog, is now completely manned by Somalis. The three leading officers of the Puntland and two of the Berbera are Yugoslav, but all the other ratings are Somalis. There are about five expatriate officers each on the Benadir and the Juba which are more technically sophisticated than the other ships. There are plans to upgrade the marine school at Mogadiscio.

55. SNSL is studying plans to review its fleet because the maintenance cost of its old ships is high. The Line intends to expand its activities to increase its share in the carriage of the country's trade. At present it hardly participates in the import trade, and its share of exports is about 20 per cent. The two leading exports are live animals and fruits (mainly bananas) accounting for 57 per cent and 21 per cent respectively by value of the total export trade of 391 million Somali shillings in 1974. The most important destinations in 1974 and their share of total exports are Saudia Arabia, 57 per cent; Italy, 10 per cent; Iran, 7 per cent and Kuwait, 5 per cent. 1/

1/ Somali Republic, Foreign Trade Returns 1974, Mogadiscio, 1975.

56. The Line is planning to purchase another refrigerated banana ship, and at least one other animal carrier, which should be able to carry camel. The company also intends to acquire a tanker which can transport crude oil to the country's refinery which is under construction. The tanker may also be used for the distribution of refined products along the coast. A promising area of future expansion is the import trade which is at present almost entirely carried in foreign ships. SNL is also currently studying the possibility of developing a transshipment trade between Berbera or Djibouti across the Red Sea for Saudi Arabian foreign traffic which cannot be handled directly at congested domestic ports. The Line is also actively pursuing operational collaboration with its counterpart in Tanzania.

(iii) Mozambique

57. There are at present two coastal companies in Mozambique, Companhia Mocambicana de Navegacao (CMN) and the Empresa do Limpopo, which are privately owned but which could be nationalized. Each of the two companies own three ships. All the six ships are general cargo carriers, but the Liwungo, the Liazi and the Linde have tankage capacity of 58, 33 and 49 tons respectively for liquid cargoes (table 17). Table 18 gives the traffic performance of the companies, and shows the Limpopo as the more important.

Table 17: Mozambique's coastal fleet

Name	Type	When built	DWT	Owner
Liazi	General cargo	1957	1,500	Limpopo
Liwungo	General cargo	1948	1,170	Limpopo
Linde	General cargo	1971	2,944	Limpopo
Chinde	General cargo	1957	1,532	CMN
Muanza	General cargo	1969	2,028	CMN
Polana	General cargo	1967	2,624	CMN

Source: Directorate of Marine Services, Maputo.

Table 18: Mozambique's coastal traffic in tons

Year	Limpopo	CMN	Total
1973	260,444	140,560	401,004
1974	235,191	116,719	351,910
1975	128,703	60,678	189,381

Source: Directorate of Marine Services, Maputo.

58. Table 19 provides some detail of the operation of the CMN. The company has suffered decline in number of voyages mainly as a result of poor turn-around at the ports, especially at the main railway ports where the declining cargo handling rate is now said to be inferior to that in the smaller ports.

Table 19: Traffic of CMN, 1973-1975

Year	Coastal traffic	Trans-shipped cargo	Total cargo	No. of voyages	No. of ships	Average ton per voyage
1973	111,534	29,026	140,560	47	4	2,991
1974	93,485	23,234	116,719	27	4	4,323
1975	48,540	12,138	60,678	18	3	3,371

59. There is an urgent need to expand the fleet of Mozambique to cope with domestic trade and operate to neighbouring countries. A proposal to acquire a shipping unit of two barges of about 2,500 tons each and one tug is being studied by the marine administration. The country which, at present, has one fully certified ocean-going captain is faced with a manpower problem in the shipping sector. A nautical school is to be established in Maputo.

(iv) Tanzania

60. The Tanzania Coastal Shipping Line was established in May 1971 in response to a need for secure transport service between Dar es Salaam and Mtwara in the south. The available lateral coastal road could not be used for most of the year because the unbridged broad valley of the Rufiji river is flooded, and the cost of a permanent road link was prohibitive.

61. The first ship of the company, the m.v. Mtwara, 650 DWT, built in Norway, was put in operation in April 1972. The Line has since acquired two other ships, the m.v. Lindi, 550 DWT, built in 1974, and the m.v. Mwenge, 2,240 DWT, a second-hand ship. The Mtwara is a conventional dry cargo vessel with additional accommodation for 150 passengers, but the Lindi is especially designed to be able to call at shallow ports like Lindi and Kilwa which the Mtwara cannot visit. Moreover, the Lindi is built for roll-on roll-off operation. It has accommodation for cargo and 150 passengers and it can be used as an animal carrier when necessary. The Mwenge is a conventional dry cargo vessel which was intended, after conversion, to carry cattle to Saudi Arabia. It was found after purchase that it would be uneconomical for the purpose. The company has since tried to operate it in the Mogadiscio-Maputo range for general cargo.

62. Both the Mtwara and the Lindi were partly financed by a loan from Norway under the auspices of the Norwegian Agency for International Development (NORAD). NORAD provided the first general manager of the company, who has since been replaced by a Tanzanian, but all the chief officers of the two ships and the marine superintendent of the company are from Norway. The captain of the Mwenge is Indian.

63. The Line faced a number of operational problems largely due to lack of local personnel to manage the ships that are rather sophisticated. Some cost-saving modifications to the original design of the Lindi now make it difficult to manoeuvre in ports. Its shallow draught is also a serious

disadvantage in rough weather, when some times it has to cruise at 5 knots. The operation of the Line is also handicapped by the poor condition of the coaster berth in Dar es Salaam. As a result of the absence of needed facilities, the Lindi cannot operate as a roll-on roll-off ship. The surface of the quai is rough and the transit shed is in a poor state. The East African Harbours Corporation claimed they were not given adequate notice before the introduction of the service, but unfortunately there has been no improvement of the wharf since then.

64. The company carried 74,000 tons of cargo in 1973, 121,121 tons in 1974 and 104,378 tons in 1975. It adopts palletization as a means of improved cargo handling. Pallets, stacked on the wharf with incoming cargo, are loaded by ship derrick and placed in position with a fork lift truck on board. The company has recently assumed responsibility for lake transport on Lake Nyasa and may have to provide similar services on Lake Victoria where the East African Community's lake services have been withdrawn.

65. Several proposals are under consideration to expand the services of the company. Partly as a way of achieving a better utilization of the Mwenge, but also to develop new trades, the administration of the company had, in 1976, made several trips abroad: to the islands, Maputo, Mogadiscio, the Red Sea and the Gulf ports and Bombay to evaluate traffic potential and port conditions. A report of these missions was being studied in the company and the Ministry of Transport early in 1977. In addition, the Government has contacted the African Development Bank (ADB), Abidjan, for aid to expand the TCSL. The ADB commissioned an evaluation study of the company as a precondition for a loan. The report has put forward a number of recommendations for improving the present operations of the company as well as on potentially profitable lines of expansion. 1/

(v) Zanzibar and Seychelles

66. There is a Government-owned Zanzibar Steamship Service operating from the island. It makes an average of three calls a week at Mombasa and Dar es Salaam and runs to other islands, Red Sea ports and Maputo where the ships of the company have recently been involved in carrying cement. Voyages are not regular but are arranged according to available cargo. The fleet at present consists of three vessels: two small ones with a cargo capacity of about 300 tons each and a larger third vessel which can carry 1,500 tons of cargo. All the ships can also carry some passengers in addition to cargo.

67. The Ministry of Port and Marine Services in Seychelles operates a fleet of two small coasters. One of them, the m.v. Nordvaer, was taken over from Southern Line in June 1976. 2/

1/ Shipping Research Services, Tanzania Coastal Shipping: Draft Final Report, Oslo, November 1976.

2/ Southern Line, Staff Newsletter, No.2, December 1976, p.17.

(f) Implication for multinational co-operation

68. The present structure of coastal shipping has several implications for the establishment of a multinational shipping line. The first is that there are already in existence a number of companies in the coastal and cabotage trade which have to be taken into consideration in planning a new service. Moreover, the existing companies all operate outside their base country and to varying extents along the coast, to the islands, and also to the Red Sea and the Persian Gulf. All the local cabotage operators are planning to expand their fleet for services in the multinational area.

69. There are two other shipping projects, besides those already discussed, whose projected programmes could touch on the prospective role of a regional coastal shipping line. The first is a proposed joint shipping service between Tanzania and India which is to specialize in the carriage of animals from Tanzania to the Persian Gulf and India. The second project is the on-going Chinese-Tanzanian Joint Shipping Company established in 1967. The four ships of the company, each of about 10,000 DWT, now operate to the Far East, the Persian Gulf, the Mediterranean and Europe. It has been proposed that the two countries extend their collaboration to the tanker trade, especially to lift petroleum for local refineries.

70. An important current development in the region is the emerging understanding between Tanzania, Mozambique and Somalia in the field of shipping. Shipping is an important topic under the permanent joint commission for economic co-operation between Maputo and Dar es Salaam. The two countries have agreed to use their local currencies as the basis for trade and transport remains an outstanding deterrent to trade. The officials of the two countries have already agreed to establish a joint shipping service, initially to link the two States, but to expand later to other parts of the region or even deep-sea operations. Preliminary contact has been made for external assistance to support a market survey and officials of the countries are working on the plans for this joint service. Consultations are also going on to introduce a common tariff to apply to ports in the countries. Agreements have also been reached to allow their existing ships free access to cargo in both countries.

71. Similar collaboration is also envisaged between Tanzania and Somalia. The Somali National Shipping Line is keen on co-operation with other East African national lines. A meeting linking Tanzania, Somalia and Mozambique was being planned early in 1977 to discuss co-operation in the field of shipping.

IV. STRATEGIES AND REQUIREMENTS FOR IMPLEMENTATION

72. This section explores how the objective of a multinational coastal shipping line in Eastern Africa can be achieved in terms of the alternative lines of action and the main necessities for implementation.

A. OPTIONS FOR IMPLEMENTATION

73. The following five lines of action can be taken to develop a multinational shipping service, given the present situation in the region: merger of existing lines, extension of a multinational shipping enterprise, conference type co-ordination of lines, a consortium for multinational services, or a new multinational joint enterprise. Before these alternatives are considered, an initial issue is the need for collaboration.

(a) Need for multinational action

74. The present pattern of shipping services and their anticipated expansion in the region emphasize the need for multinational co-operation. Over-tonnaging will result if each country continues to plan the expansion of its fleet in isolation. Such a situation will reduce the profitability of all the enterprises. Moreover, a shipping business becomes more viable if it is able to count on the traffic from as wide an area as possible. This is an important benefit of collaboration. Traffic can be assured from the participating countries and the development of the line can be planned with security.

75. There are other advantages of a multinational enterprise which may not be achieved easily by a national or private one. ^{1/} A joint shipping enterprise can have access to international financial sources and secure ships on advantageous terms because of the sharing of risks among several countries and the backing and involvement of governments. Such an undertaking can also draw its managerial and technical staff from a larger home area and reduce the external dependence which is necessarily high for a similar project in one country.

(b) Merger of existing services

76. A multinational shipping line could be created immediately if the ship-owning countries agree to fuse their existing fleets and put them under centralized control. This approach has a number of problems. An arrangement has to be worked out to accommodate non-ship-owning countries in the region willing to participate. Moreover, the merger of the fleets will transfer not only assets and liabilities but also various domestic operating responsibilities which may be difficult to harmonize and manager under a centralized control. The TCSL, for example, has obligation to develop services of internal lakes. This is an important economic and social task to

^{1/} UNCTAD, Multinational shipping enterprise, document TD/108/Suppl., 16 December 1971, pp.6-16.

assist development in these areas, at present denied access to regular transport. But this is a function that is best performed by a local enterprise rather than a regional one. In general, intranational coastal shipping, which may be conceived from the political and social objectives of the country, may be better controlled locally rather than transferred to a distant multinational undertaking. The tasks of co-operation may be made easier if the countries collaborate in the provision of regional extra-national coastal shipping rather than for purely local traffic.

(c) Extension of the EANSL

77. It is possible to consider using an existing multinational shipping organization as a base for providing regional coastal services. Four countries in the region already co-operate in the East African National Shipping Line (EANSL) which can develop a coastal arm to serve the region. It can be argued that such an approach will avoid the initial huddle of seeking concurrence of several countries in starting a new venture, and that the new service can benefit from the operational structure of an existing organization. Many reasons make this an unattractive strategy.

78. There are countries interested in coastal shipping outside the EANSL, and their membership need not be a pre-condition for participation in a regional project. Moreover, deep-sea and coastal shipping are different kinds of industry such that little economy may result from putting both under a common undertaking. The area each serves its level of cargo requirement, the types of ships and even technical personnel needed, and the structure of operations are different. Moreover, EANSL is at present a small deep-sea line owning only four ships, and frequently has to resort to chartering others to meet minimum sailing requirement of the conference system. The Line has had management and financial problems which are now being solved. The obvious approach to its expansion is to consolidate its position as a deep-sea carrier and improve its role within the Conference.

(d) A conference of national coastal companies

79. A conference type of co-ordination of existing coastal operators and possibly new ones can achieve the aim of a regulated multinational shipping service in the region. The individual lines can maintain their separate identity, but they operate according to a common sailing schedule and under identical terms of carriage and freight rates. This approach also has the advantage that both State-owned and private enterprises can be accommodated. Moreover, each line can look after its fleet and monitor costs and revenue directly and also honour any additional operational obligations other than subscribing to the co-ordinated service.

80. This approach has a number of disadvantages. Interested countries who do not as yet own ships have to start new ventures before they can be involved in coastal shipping. This may lead to a proliferation of businesses, whereas the intention of multinational action is to save effort in the organization of enterprises. Moreover, the planned expansion of existing lines may not be co-ordinated adequately under a conference system. They could avoid

possible overlap in the acquisition of ships if they sponsor a joint fleet development study after which they can share responsibility for buying new tonnages that can be complementary.

(e) A consortium

81. The conference type of arrangement can be improved if existing lines collaborate in a consortium to operate in the multinational area. Each line can still retain its identity, but tonnages required for operation can be acquired and registered under the names of the participating companies so that, in essence, each component line owns part of the joint operating fleet. The example of the Scandinavian Airlines System (SAS), which has three members, is given commonly to illustrate pooled operation of a number of constituent companies. This arrangement achieves centralization of control and development but still permits some national identity which is sometimes an important consideration. Such a structure could be more appropriate in a large capital-intensive industry than in coastal shipping.

(f) A joint enterprise

82. Another approach to the problem is for the countries to form a new joint-venture company to manage multinational shipping in the region. The existing companies could continue to operate solely for lake or internal coastal services. All inter-State operations can be placed under the multinational company. Any owned ship not required on local services can be transferred to the joint venture. Such a transfer, when valued, can be taken as a part of the contribution of the owning country. The M.V. Mwenge of the TCSL, and which is not required for domestic services, can be treated in this way.

83. The establishment of a new joint venture can permit countries which do not at present own ships to contribute to, and participate in the project if they so desire. An important advantage of this approach is the centralization of fleet expansion. The board of the company can always appraise the market and decide on what ships are needed, and these can be acquired from financial contributions made by the participating countries or from credit acquired from local or international financial institutions.

84. The registration of the ships of the joint company can still be shared, as it is done under the EANSI whereby the four ships owned by the company are registered, one each, in the four participating States. Legal procedures for the establishment and operations of the company will need to be looked at more closely.

B. REQUIREMENTS FOR IMPLEMENTATION

85. There are a number of pre-conditions needed to achieve the goal of a multinational coastal shipping line. These are commitment, definition of objectives, establishment of institutional arrangement for implementation, governmental support, determination of level of operation, procurement of materials, finance and manpower, determination of suitable operational organization.

(a) Commitment

86. It is vital for the countries interested in the project to get together to commit themselves to a firm programme of implementation. It is also necessary for the countries to constitute a permanent intergovernmental committee of officials to supervise, on a continuing basis, the implementation activities. Recommendations of this committee can be passed directly to the governments of the individual countries for ratification or to a council of ministers responsible for transport in the collaborating countries.

87. There should be a project contact man in each country who will relate the activities of the implementation committee and of the ECA-MOC to the component ministries and agencies in each country. He will assist in obtaining necessary information for the implementation activities and make local arrangements to facilitate the investigations by project staff. The contact personnel could even constitute a national project committee to bring together related persons in government and the private sector.

88. An important dimension of commitment is for participating countries to agree to pursue all their plans for the development of coastal shipping in the context of multinational collaboration. In this regard, countries in the region like Tanzania, Somalia and Mozambique that have plans to expand their coastal services and have initiated studies should agree that further action on the implementation of these studies should be within the context of the proposed multinational coastal line.

89. It is also necessary at the beginning for the participating countries to agree on the scope and objectives of multinational action. Conflicts commonly arise when some members of a joint enterprise stress economic efficiency but others emphasize social and political objectives. The proposed multinational shipping line should aim at profitability and economic efficiency, and avoid undue political interference in the routine management of the company, which may lead to over-staffing and the employment of unsuitable persons as compensation for political loyalty. The line should also be operated as an instrument of trade promotion between the participating countries in which rates can be kept as low as is compatible with profitability.

90. The government(s) could agree to give special subsidy to support unremunerative traffic or service that is considered important on other grounds. Such operating subsidies are commonly applied even in the developed countries to assist domestic shipping as in the case of the United States which grants operating subsidies in respect of about 31 trade routes declared "essential". ^{1/} The countries can also agree that profits derivable from the company shall be ploughed back to strengthen its operation, at least in its first years, rather than be shared as dividend.

^{1/} S.A. Lawrence, United States Merchant Shipping, Policies and Politics, Washington, D.C., 1966, p.142, cited in UNCTAD, Establishment or expansion of merchant marines in developing countries, New York, 1968, p.49.

91. The participating countries can enact legislation to reserve all regional coastal traffic in their territory to the multinational line. There are precedents for such support which does not appear to be against the code of conduct for liner conferences since coastal shipping can be viewed as internal to the countries. Tanzania already reserves all coastal traffic rights in the country for the TCSL. Chile, Australia and the United States are examples of countries with important reserved coastal trade. The American case even includes transport between Hawaii and the mainland which, although it is conducted by ocean-going ships, is classified as coastal trade. 1/

(b) Preparatory activities

92. The beginning of the preparatory studies needed to launch the multinational line is an analysis of the potential traffic over a planning period of five to ten years. This involves a review of the economic programmes of the countries and a projection of the aggregate volume of trade between the countries, the types of commodities, the spatial derivation of the traffic and the relative share that can be attracted to a competitively operated coastal shipping line compared to alternative means of transport. This detailed traffic projection is an input for cost-benefit analysis of fleet acquisition and operation. Investment appraisal could be performed for particular potential traffic like tanker trade, carriage of animals and general cargo, rather than attempt a global study of all possible trade between the countries.

93. The type of ships to purchase will depend on the type of traffic and also the facilities available in the ports as well as in the hinterlands. There is some controversy whether dry cargo ships for coastal services should be of the conventional break-bulk type or designed for unitized operation, especially for containers, pallets or roll-on roll-off. The use of the barge-train has also been suggested as a suitable technique for East African coastal shipping. The train could consist of two or three dump barges of between 1,000 to 3,000 tons, pushed by a tug. The advantage of this concept, like the LASH system, is that the utilization of the propulsive unit is very much improved. Some barges can be discharged at a port, to be loaded or unloaded, while the tug plus other units continue the journey without any delay. Palletization is at present a feasible and relatively cheap technique that can be adopted in the ports of the region.

94. Port facilities for more capital-intensive forms of unitization have to be provided to justify investments in specialized ships. Improvements are needed in inland transport infrastructure and trading structure to secure the advantages of unitization. The ships of the TCSL, designed to operate as roll-on roll-off vessels, use unsuitable port facilities and are marked at present as conventional vessels. Any additional cost incurred to construct

1/ UNCTAD, Establishment or expansion of merchant marines in developing countries, New York, 1968, p.10.

them as special vehicles has thus been a waste. Containers being handled at Dar es Salaam at present are stuffed for export and incoming ones are broken down, in the port premises. This procedure, due to absence of adequate backstopping infrastructure, hardly achieves any savings in port operating costs. The planning for the multinational shipping line should be done in collaboration with the port authorities in the region who have to be persuaded to pursue policies that can induce coastal traffic.

95. Capital is a major requirement to achieve the aims of the project. The size of the needed financial outlay can only be perceived clearly after the survey for the potential demand and a decision taken on the types of ships required and the programme for their acquisition. The collaborating countries may need to make some contribution from their internal resources as a token of commitment. Funds and other assistance can be sought from international financial bodies and friendly countries. Tanzania had developed useful contacts with the ADB and the Norwegian Agency for International Development (NORAD). Joint application by the countries can be made to these and other mutually acceptable agencies, early in the implementation programme.

96. The level of operation of the line will determine the type and number of managerial and sea-going personnel required. A dearth of suitable personnel is a major problem limiting an effective participation in the shipping industry by the countries in the region. There are training components to a number of multinational shipping projects in the region, for example, the EANSI, the Tanzania-NORAD agreement and the Chinese-Tanzanian arrangement. The impact of these training programmes has been minimal. Most of the cadets who have completed their training under these arrangements have not been retained in the countries. An important indication of the inadequacy of present training arrangements is the absence of suitably equipped institute(s) located in the region. Some training is conducted in local polytechnics, but the countries still rely heavily on outside institutions. The organization of training facilities is an important area for multinational action. Regional arrangements will not be faced with the serious problems of shortage of funds, equipment, staff and under-utilization which are likely to attend national efforts.

97. Preparatory work is needed on the organizational structure of the company which will link the board of management, which has to be constituted, with a general manager and other chief officers, the operating branches and departments. The draft articles of agreement between the countries have to be prepared as well as a freight tariff and an operational schedule. In addition, branch offices and agency arrangements have to be established before the line can be launched.

V. CONCLUSIONS AND RECOMMENDATIONS

98. This report has reviewed the relevance of coastal shipping in Eastern Africa, the present pattern of demand and organization of services and the requirements and strategies for establishing a multinational line.

(a) Relevance

99. Coastal shipping is relevant to Eastern Africa in view of the long coastline and the presence of off-shore islands. This relevance has two time dimensions. The first is now when there is no adequate long-distance interregional surface transport such that coastal shipping is a means of stimulating regional trade. The second period is when long-distance surface alternatives are available. In this second period, shipping may still possess a cost advantage for bulk commodities, especially industrial raw materials and products moving between locations on the coast. Coastal shipping is protected from competition as its range of operation is lengthened. The planning of shipping services in the region should be viewed in a broad cabotage range from Maputo to Mogadiscio and further afield to the Red Sea and the Persian Gulf.

(b) The present demand

100. Three types of traffic can move on coastal shipping services: passengers, transshipped cargo and domestic trade between the countries. There is some potential for local as well as tourist coastal traffic. Water transport is a poor competitor with other means of transport for passenger traffic. Future development of coastal shipping would be more secure for cargo services rather than for passengers.

101. Transshipped traffic like coastal traffic in general has declined markedly in the region as a result of lack of adequate port facilities and excessive port charges. The situation of the main ports is improving and prospective changes in shipping may emphasize the role of the major ports and once again make transshipment traffic important.

102. The domestic traffic at present consists of both liquid bulk and dry cargoes. Crude oil is moved from the Persian Gulf to the refineries of the region by tankers hired by the oil companies. Smaller parcel tankers distribute products from the refineries to smaller ports. Some coal moves in bulk from Mozambique to Kenya. Substantial cargoes of cement are moving from Mozambique to Tanzania and fertilizer is another potential traffic in the same direction. Some sugar also moves from Maputo to Mogadiscio. Kenya is at present the main centre of generation of domestic coastal traffic being the most industrialized country. Given a positive attitude to inter-State trade, further traffic could be generated that may move by coastal shipping.

103. No thorough study of existing pattern of coastal shipping has been made and this is a vital necessity for planning a new service. It can be concluded that although the present traffic is not enormous, it is a sufficient basis to launch a multinational line. It has to be borne in mind that the traffic

requirement and the size of ships needed for a coastal service are of a similar order compared to deep-sea shipping. Moreover, what is envisaged immediately is not a mammoth coastal fleet, but a well-run relatively small business, providing vital linkages between the countries and helping to facilitate further trade relations.

104. The following trades, which can be studied further, appear attractive areas of investment for a multinational shipping line:

- (i) Carriage of animals from Somalia and from Tanzania to Saudi Arabia and to off-shore islands;
 - (ii) Transport of chilled meat to the Middle East;
 - (iii) Transport of crude oil from the Middle East to oil refineries in Somalia, Kenya, Tanzania and Mozambique;
 - (iv) Transport of refined petroleum along the East African coast from the refineries to smaller ports, and also in cross trades in the Middle East;
 - (v) General cargo trades along the coast in the range from Maputo through Mogadiscio to the Red Sea and Gulf ports.
- (c) Present coastal services in the region

105. Eastern Africa has been served mainly by deep-sea shipping lines which operate to destinations outside Africa. It is not economic for these lines to serve wayside ports in the region. It is in the last two decades that coastal shipping enterprises have been established, based in the countries of the region.

106. The oldest of such coastal services is the Southern Line, a privately owned company registered in Kenya. It has a fleet of three tankers for the movement of refined petroleum along the coast, and also two cargo ships. The Somali National Shipping Line was established in 1972 and it engages both in deep-sea operation in the country and across the Red Sea. It has a fleet of five ships. The Tanzania Coastal Shipping Line started operation in 1972 and now controls a fleet of three ships and 11 schooners. It is legally the only coastal operator in the country. The line was developed with financial and technical assistance from Norway through NORAD. In Mozambique, two privately owned companies run a fleet of six coasters. On the islands, Zanzibar Steamship Services owns three coasters, and the Seychelles Government has a fleet of two vessels.

107. The various coastal lines have plans to expand their services. Tanzania, for example, has established contact with the African Development Bank. The ADB financed an evaluation and investment study of the TCSL which was completed recently. Mozambique and Tanzania have agreed to set up a common shipping service and Somalia has shown interest in joining this collaboration. The

Chinese-Tanzanian Joint Shipping Service could introduce new sailings within the possible area of operation of a multinational shipping line. Tanzania is also planning new ventures with India. The shipping industry in the region is faced with serious manpower problems and there is an urgent need to improve training facilities.

(d) The way ahead

108. The present situation of the shipping industry in East Africa calls for immediate multinational consultations and collaboration in the planning and expansion of services. There is a real possibility for the duplication of investments and for eventual over-tonnaging if there is no consultation. Several other advantages will also derive from joint action. The countries should also, with the aid of international organizations, establish regional training centres to provide much needed manpower for the shipping industry. This will enable them to derive more benefit from their participation in shipping.

109. There are a number of alternative strategies for planning a multinational coastal service given the present situation in Eastern Africa. The least attractive is to make a multinational coastal service a subsidiary of the EANSLS. Other alternatives are:

- (i) Merger of all existing national coastal shipping lines;
- (ii) Conference-type collaboration between existing lines;
- (iii) Formation of a consortium from the present lines to operate a joint regional service;
- (iv) Formation of a new multinational shipping line.

Representatives of countries interested in the collaboration can decide which form of co-operation is acceptable. It is important that, whichever alternative is chosen, fleet development is planned jointly.

110. The first pre-condition for the implementation of the project is an expression of commitment on the part of the countries which are willing to collaborate. An intergovernmental implementation committee has to be set up, and an implementation agenda adopted. The participating countries should enact legislation to reserve their extra-national coastal traffic to the joint enterprise. The countries should also agree to channel all their on-going proposals for shipping development in the regional and cabotage range into the multinational project.

111. Other requirements to ensure implementation of the project are:

- (i) Market survey and traffic projection to determine in detail the level and characteristics of possible demand for a coastal shipping line in aggregate or for specific services taken separately, e.g., transport of animals, tanker trades or general cargo operation;

- (ii) Fleet requirement: to identify the type of ships to be purchased;
- (iii) Port facilities: the planning for a multinational line should be undertaken in consultation with the port authorities in the region so that policies conducive to the growth of coastal traffic is pursued;
- (iv) Financial requirement: depending on the phased fleet acquisition, the proper cost-benefit analyses, the financial requirements for the line have to be determined. Collaborating countries may establish a development fund to which they can contribute, and ship-owning countries may contribute ships. The countries should also make joint approach to international financial institutions like the ADB and agencies like NORAD for assistance. But the planning for the line should be controlled by the implementation committee set up by the countries;
- (v) Manpower requirement: both managerial and technical (sea-going) staff will be required. Outside recruitment should be taken as a short-term measure and the countries should endeavour to achieve self-sufficiency through local training;
- (vi) Legal and organizational framework: the articles of association have to be prepared; the board of management constituted and the chief officers appointed. The freight structure, agency arrangements and operational schedule for the line have to be prepared before a service can be launched.

(e) Recommendations

112. It is recommended that:

- (i) Multinational action is vital for the organization of coastal shipping services in Eastern Africa;
- (ii) In view of the available traffic and prospects for trade in the region, a viable multinational shipping enterprise can be established given good planning and management;
- (iii) Such a multinational line will engage in lateral trade along the coast in the region, to the islands and also in the cabotage range to the Red Sea and the Persian Gulf area;
- (iv) A meeting of shipping, transport and trade experts in the region should be summoned to consider the proposals of this report;
- (v) Countries interested in the project and committed to collaboration should set up a permanent intergovernmental committee of experts to work out the phases of implementation and supervise implementation activities on a continuous basis;

- (vi) Interested countries should agree to channel all their on-going proposals for related shipping development into the multinational project;
- (vii) Collaborating countries should make an early and joint approach to possible external sources of support and finance like ADB and NORAD;
- (viii) In planning the execution of the project as much use as possible should be made of local expertise in order to avoid some of the mistakes in previously externally directed shipping projects;
- (ix) The countries in the region, in collaboration with international agencies, should embark, as a matter of urgency, on joint training programmes in the region: the provision of ship repair facilities on a multinational basis is also an area for collaboration;
- (x) Collaborating countries should enact legislation to reserve their coastal traffic for the multinational enterprise;
- (xi) An immediate decision should be taken by the collaborating countries on the acceptable form of collaboration: conference-type co-ordination of services, merger of lines, consortium, or new joint enterprise;
- (xii) The following preparatory studies to determine the requirements for the line have to be commissioned by the implementation committee: detailed demand analysis, fleet, financial and manpower requirements and the legal and organizational structure.
