

Distr.
GENERAL

TD/B/WG.2/11/Add.2
22 February 1994

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Ad Hoc Working Group on Trade Efficiency
Third session
Geneva, 2 May 1994
Item 5 of the provisional agenda

DRAFT GUIDELINES ON KEY SECTORS FOR TRADE EFFICIENCY

TRANSPORT

Report by the UNCTAD secretariat

CONTENTS

	<u>Paragraphs</u>
Introduction	1 - 13
I. THE COST OF TRANSPORT	14
A. Money costs	15
1. Ocean freight rates	15
2. Port charges	16
3. Inland transport costs	17
4. Insurance premiums	18
5. Additional handling and transport costs	19
B. Transit time costs	20
1. Interest charges and inventory costs	20
2. Delays in payment to traders	21
3. Penalties for late delivery of goods	22

CONTENTS (continued)

	<u>Paragraphs</u>
C. Costs from loss, damage and delays	23
1. Damage to goods in transit	23
2. Loss of goods in transit	24
3. Delays in transit	25
4. Costs of accidents occurring during transport of goods	26
D. Conclusion	27 - 19
II. THE QUALITY OF TRANSPORT	30 - 31
A. Maritime transport	32 - 33
B. Inland waterway transport	34
C. Railways	35 - 39
D. Roads	40
E. Ports	41
F. Air	42
G. Multimodal transport	43
H. Conclusion	44 - 45
III. RECOMMENDATIONS	46
A. Recommendations to commercial parties	46
B. Recommendations to governmental departments	46
C. Recommendations to intergovernmental organizations	47
D. Implementation of the suggested recommendations	48

ABBREVIATIONS

ACIS	Advanced cargo information system
ASYCUDA	Automated System for Customs Data and Management
B/L	Bill of lading
CFS	Container freight station
c.i.f.	Cost, insurance, freight
EDI	Electronic data interchange
FAK	Freight all kinds
FCL	Full container load
f.o.b.	Free on board
ICC	International Chamber of Commerce
ICD	Inland clearance depot
IMDG	International Maritime Dangerous Goods Code
INCOTERMS	International Rules for the Interpretation of Trade Terms
ISO	International Organization for Standardization
L/C	Letter of credit
LCL	Less than full container load
MFN	Most favoured nation
MTO	Multimodal transport operator
NVOCC	Non-vessel operating common carrier
UCP/ICC500	International Chamber of Commerce Uniform Customs and Practice for Documentary Credits

INTRODUCTION

1. Trade and transport are inextricably linked; efficient transport services are a prerequisite to successful trading. Over the past 40 years, there has been an almost unbroken growth in international trade, and improvements in transport services have played a significant part in that growth. For example, over 4 billion metric tons of cargo are carried in maritime trade each year. In 1991, the tanker market (crude oil and products) amounted to 1,750 million metric tons, and dry cargo trades 2,300 million metric tons, of which the main bulk cargoes contributed 975 million metric tons and non-bulk dry cargoes, including general cargo, 1,325 million metric tons. Maritime transport carries over 90 per cent of all international trade.

2. It is probably a valid generalization that transport is not a barrier to trade in the developed countries of Western Europe, North America and Australasia. From the aspects of efficiency, availability, quality, logistics and cost, traders in those regions are well served by transport providers. To a considerable extent, the same is now true of the newly industrialized countries of South-East Asia (Taiwan, Province of China, Republic of Korea, Singapore, Malaysia, Hong Kong et al.). The success of their Governments' strategies of economic growth through export expansion had been to a large extent made possible by considerable investment in transport infrastructure and equipment, and by the development of transport management skills. In the developing countries of Africa, Central and South America and Asia, on the other hand, the trader is faced with a number of very serious logistical and other problems when trying to obtain transport services both for domestic and for international transportation of goods.

3. Even in the latter countries, the problems faced do not affect all traders equally. Large trading or industrialized companies often have their own transport and distribution departments, with their own vehicles and equipment. The departments are staffed by professional teams with specialized knowledge and expertise, who know their companies' transport needs and the markets into which they are selling. Such teams have the necessary negotiating weight and skill when dealing with transport providers, and are able to manage and control all distribution activities: chartering vessels, booking space, handling documentation, Customs clearance, etc. Medium-sized and small trading companies, however, do not have this expertise in-house, and may have to rely on freight forwarders when arranging transport and other services. They do not normally have any distribution channels, preferring to sell FOB and buy CIF or, if they do have access, such distribution channels are usually long and indirect, involving middlemen or subcontractors in the countries both of export and import. These smaller companies would particularly benefit from the creation of Trade Points, provided such Trade Points are staffed with transport specialists. The need to ensure the independence of the Trade Point (transport) specialist function, a point raised in another paper, is equally pertinent to the transport field.

4. It seems justified within the present context, therefore, that attention be focused on the transport difficulties (and trade facilitation difficulties relating to transport) faced by small and medium-sized traders of developing

countries - those shippers who usually dispatch or receive goods in relatively small consignments carried on common-user liner services. The aim of this report is to identify and analyse their transport problems as far as possible, and to indicate how difficulties might be eliminated or at least alleviated to improve trade efficiency. In endeavouring to achieve this aim, one must bear in mind that the objectives to achieve higher efficiency for the three main actors, i.e. (i) the rule makers (authorities), (ii) the sellers and buyers, and (iii) the transport operators, are not necessarily identical.

5. For example, while the authorities may provide appropriate (transport) legislation, the sellers and buyers are more concerned with making the best choice of transport to get their products to their markets in the best possible condition and at the most appropriate time while the transport operators concentrate on improving their transport capabilities to serve their customers. Each of these three types of "players" often carry out their functions with scant regard for the real needs of the other two. However, if it were possible to "persuade" all three to act in concert, for example, through the connections established in the Trade Points, or through the various trade and transport facilitation committees which exist around the world, a more efficient way forward might be found. If Governments took upon themselves the task to promote cooperation between the three sets of players, this would already be an important step. At the institutional level this may be done through active support for Trade Points by all concerned, and by assistance, from the Governments, to enhance the image of national transport providers. At the commercial level, Governments should be in the forefront of streamlining the bureaucratic processes while traders should undertake active campaigns to increase awareness and wider understanding of the effects which the use of correct INCOTERMS, UCP 500 and appropriate transport documents might have on their own profits. Attention to risk management and appropriate insurance cover must not be neglected. National transport providers, for their part, must learn how to "market" themselves, how to enhance their own status (through membership in trade associations, etc.) and how to offer transport services shaped to the needs of their clients.

6. At the operational level, availability of the necessary physical infrastructure is obviously a must. However, many medium-sized and smaller shippers and transport providers do not have a very good understanding of all the possible combinations (and benefits) which could emerge from a closer and joint analysis of the buyers' product requirements, timely arrival of goods - in perfect condition at the right price. In order to accomplish this, better knowledge of the whereabouts of the goods as they move through the transport chain is required.

7. Improvements in the management of transport operators is also vital. In this context data information systems which track goods from points of origin to destination, linking all operators within a transport chain, are of obvious benefit. Such tracking systems provide data to improve the efficiency of ports, railways and road hauliers and provide freight forwarders and shippers

with accurate data on the whereabouts of their cargo for final offtake. One such system is the UNCTAD-developed Advance Cargo Information System (ACIS). ACIS provides the following overall facilities:

- Improved information to help monitor the operations of individual transport operators;
- Advance information on the movement of individual consignments, providing the opportunity to transport managers to plan the optimum use of transport networks, equipment and standing facilities, leading to improved transit times for goods;
- A database facility available to a party registered as having an interest in a consignment and its transportation, providing them with the latest reported location and status of goods and transport equipment;
- A database for rational corporate planning by transport operators; and
- A long-term record of transport movement data to build up national and subregional databases where appropriate and to permit governments and institutions to analyse national, subregional and regional problems in order to investigate alternative investment opportunities in the transport sector.

8. As designed, ACIS aims at transferring technology to the users through training, addressing basic operational problems in the transport sector and forging economic and commercial links between users in and outside the various beneficiary countries. ACIS is designed to change transportation culture by promoting "business partnerships" between those involved with cargo transits, whether these be operators or clients both on a national and an international level. As a result private and public sectors will be brought together with transportation clients so that all will be aware of the reasons for any delay and/or lack of quality in the transportation of consignments. ACIS is a necessary "enabler" to provide information on the progress of consignments so that market pressure can be applied to identify and cure the causes for delay and other problems.

9. While Trade Points undoubtedly will overcome some of the problems mentioned above, simply by being there, it is obvious that much more needs to be done, particularly in the field of training.

10. The problems manifest themselves to individual traders in the form of:

- High distribution and marketing costs;
- Reduced profit margins;
- Reduced international competitiveness; and
- Constraints on business expansion.

11. To the traders' countries, such difficulties result in:

- Failure to develop their international trade potential;
- High prices for imports;
- Meagre foreign exchange from exports;
- Restricted investment and employment; and
- Limited economic growth.

12. Clearly, any improvements that can be made to the present transport conditions will have significant impacts on the economies of developing countries and the prosperity of their traders. This document attempts to identify the critical issues which connect trade and transport efficiency. It also attempts to analyse specific transport problems, and to suggest how the problems can be alleviated. For convenience, and to assist in the analytical process, the problems are considered under two major headings:

- (a) The cost of transport, and
- (b) The quality of transport.

13. It is argued that in both these areas, the small and medium-size trader is usually at a disadvantage in comparison with his/her counterpart in developed countries. In the sections below, each of these areas will be considered in turn, identifying in each case the major factors and contributors to the problems, and offering possible solutions. It is not claimed that all problems have at this stage been pinpointed, and certainly not that all possible solutions have been identified. In the next phase of this project the gaps will be filled in and evidence, information and data will need to be assembled to support the suggestions and assertions assembled here.

I. THE COST OF TRANSPORT

14. It is generally true that the cost of transport is relatively higher for traders in some developing countries than in developed countries, in terms of "generalized transport costs", consisting of expenditures, costs of aggregate transport time and costs arising from loss, damage and delay (or the high risk thereof). Statistics show that developing countries have consistently paid higher ocean freight rates as a percentage of the CIF import values, while inland transport and other transit costs are acknowledged to be higher than in developed countries. 1/ UNCTAD calculations indicate that the freight costs for land-locked developing countries amount to 16 per cent of the value of their imports, compared with 11 per cent for all developing countries. 2/ These high costs impede trade and act as a barrier, just like tariffs and non-tariff measures. The economic distance of developing countries from their markets is great, and this could distort trade. The three components of generalized transport costs, namely expenditures, transit time and potential loss, damage and delay will be dealt with separately below.

A. Money costs

1. Ocean freight rates

15. Ocean freight rates for developing countries are nearly double those for developed countries. Liner shipping rates (by which the goods of small and medium-sized traders are almost exclusively shipped) amount to 8.6 per cent of the CIF value of goods for developing countries, compared to 4.4 per cent for developed market-economy countries. ^{3/} Developing countries are also more likely to have to pay for transshipment services; this is inevitable in some trades, where the volume of traffic does not justify direct calls. The lack of direct calls increases freight rates and imposes additional transport costs on traders.

Causes:

- (a) Traders lack of knowledge of shipping practices.
- (b) Lack of bargaining power to negotiate favourable rates by traders in developing countries, who ship in relatively small consignments.
- (c) The volume of international trade on some routes is too small to provide the economies of scale obtained on routes linking the main trading centres.
- (d) Lack of direct services means that traders in many developing countries have to rely on feeder services and to pay for transshipment.
- (e) The high costs of handling in ports, and delays to vessels there, contribute significantly to shipowners' voyage costs, prompting them to set high freight rates.

Solutions:

- (a) Improve the awareness and bargaining power of traders by encouraging cooperation and strengthening shippers' councils.
- (b) Encourage cooperation and collaboration between shippers/traders, to consolidate shipments for particular destinations, to enable negotiation of quantity discounts. Assist traders to shop around for competitive rates (from operators capable of providing the appropriate quality of service), and encourage slot charter arrangements and the creation of NVOCCs to obtain more competitive freight rates.
- (c) Encourage direct calls by main line vessels where feasible so as to ensure that the market is competitive (this is particularly possible where trade is growing).
- (d) Promote efficient feeder services, possibly through regional cooperation.

(e) Improve port services to reduce delays to vessels and lower handling costs.

(f) Introduce regulatory policies and practices conducive to a more competitive shipping environment.

2. Port charges

16. Port charges are high in developing countries in comparison to their counterparts in developed countries. The direct costs imposed through high ship dues and cargo handling and storage charges are aggravated by slow ship turn-around times. The cost of delaying vessels in port puts up shipowners' costs and ocean freight rates and ultimately raises traders' transport and distribution costs.

Causes:

(a) Poor cargo handling performance resulting in long ship's time in port.

(b) Additional handling of cargo because of management inefficiency.

(c) Long storage times leading to demurrage charges.

Solutions:

(a) Improve port efficiency through a combination of institutional reforms (allowing private sector terminal operations); upgrading port management (through management training); introducing good management practices (equipment maintenance and appropriate manning levels); and the development of a more commercial and competitive environment.

(b) Improve cooperation between port authorities, Customs authorities, terminal operators and inland transport operators so as to expedite the movement of cargo.

(c) Improve maritime community information services, e.g. ACIS, to make information available to all parties in the total transport chain.

3. Inland transport costs

17. In many countries, the major problem is not ocean transport rates but inland transport costs. For example, in Africa, road transport costs can be two and a half to three times as costly as in other parts of the world and it often costs more to move a container of cargo inland to the importer's premises than to ship it from the port of export in Europe or the United States. ^{4/} It is estimated that, if African road transport costs could be reduced by 10 per cent, up to US\$ 12 billion could be saved each year. ^{5/} Rail and inland waterway charges are likewise high and do not

always constitute a viable alternative to shippers. Similarly, in parts of Asia, inland transport and handling costs for exports are said to amount up to 20 to 25 per cent of their FOB value. 6/ The proportion of door-to-door costs contributed by sea transport is actually declining in many cases.

Causes:

(a) The lack of genuine competition for transport providers, leading to high cost of inland transport in terms of tons per kilometre. Long transport distances impose punitive inland freight rates for land-locked countries.

(b) Shortage of rail, road and inland waterway capacity and the poor maintenance of infrastructure, vehicles, rolling stock and barges/marine craft. The shortage of rail capacity (or lack of a rail link) forces traders to use road transport over (uneconomic) long distances.

(c) An outdated and inappropriate regulatory framework for transport. The majority of goods are transported inland in loose/conventional form (even when it had been carried in containers on its ocean voyage) because containerization is limited for structural, legislative and procedural reasons. This constrains and restricts the provision of door-to-door multimodal transport services.

(d) Too many independent parties involved in the transport chain - freight forwarders, transport operators, ICD operators, etc., resulting in a lack of integrated services while raising costs.

(e) Shipowners calculate door-to-door freight on low container utilization rates and also include box maintenance premiums.

(f) Poor management skills and efficiency in road, rail and inland waterway transport.

Solutions:

(a) Encourage the establishment of competent multimodal transport operators to generate competition and competitiveness. Encourage greater participation of the private sector to invest in transport facilities and services and promote the establishment (e.g. by merger of smaller companies) of large transport operators prepared to provide a comprehensive inland transport service.

(b) Use the existing transport infrastructure and facilities more intensively and effectively. Support this, where appropriate, by investment in new infrastructure, container-compatible rolling stock for railways, new road vehicles and inland waterway craft, and modern equipment at marine, rail and inland terminals for efficient cargo handling.

(c) Governments should liberalize access to the transport markets and develop a legal, commercial and operational environment that promotes efficiency. They should also remove regulatory controls on the movement of

goods inland, e.g. allow movement in bond by road; allow clearance of goods at the importer's premises; withdraw the bonds and guarantees required for containers; and permit the setting up of multimodal transport operators.

(d) Amend legislation and procedural obstacles to companies wishing to set up groupage facilities and to offer door-to-door services. Amend/revise Customs regulations and streamline procedures to permit and facilitate the movement of goods inland in containers.

(e) Strengthen management structures in public sector transport corporations, in terms of accountability, performance contracts, etc.; introduce good management practices to promote cargo-handling efficiency and to eliminate demurrage and additional handling charges.

4. Insurance premiums

18. In many developing countries the legal regime covering the movement of cargo in multimodal transport is complex and confusing and leads to considerable practical difficulties in linking loss or damage to a responsible party. Sea carriers, in particular, have been reluctant to accept liability for cargo unless it is carried by their own vessels; this has assumed greater importance with the increasing use of transshipment in developing countries' trades. Inland transport presents confusing liability regimes and the segmentation between modes means a proliferation of many different documents with each document applying to the different operator involved. As a consequence, insurance premiums are a major cost to traders and there are problems in the prompt settlement of claims.

Causes:

(a) High insurance premiums because of the known high risk factors facing goods in transit.

(b) Many transport operators do not assume liability; carriage is performed at the shipper's risk. The liability regime in many countries is not developed.

(c) The Government's insistence, in some countries, that traders must insure with national companies; despite this, many traders take out additional cover with companies outside the country to ensure settlement in the event of a claim.

(d) Slow processing and settlement of claims by insurance companies.

Solutions:

(a) Improve cargo security in transit by identifying the threats, tightening security procedures and discipline; improve the design and manufacture of packaging; instal better cargo surveillance and tracking of goods in transit.

(b) Update and revise the liability regimes for all transport modes to meet the needs of efficient multimodal door-to-door carriage.

(c) Liberalize the insurance market and streamline settlement procedures.

5. Additional handling and transport costs

19. Shippers and importers are subjected to a wide range of unpredictable additional handling, processing and demurrage costs for goods in transit. These additional items of expenditure include high demurrage charges on containers and transport vehicles, high repositioning costs, additional storage charges, high documentation charges, payment of Customs bonds, payment of carriers' container guarantees or deposits, and informal payments. These add considerably to the cost of carriage of goods and make total transport costs difficult to calculate in advance.

Causes:

(a) High demurrage charges on containers and transport vehicles because of regulations that restrict the choice of transport mode and operator; a shortage of capacity; low efficiency in the use of transport services, resulting in delays to cargo beyond the free storage period; poor handling efficiency; a lack of information necessary to ensure the quick movement of goods between modes at terminal points; complex and time-consuming administrative procedures.

(b) The payment of high repositioning costs for containers because of the inability to hold empties at or near delivery points until required for repacking.

(c) Additional (penalty) storage charges for delays beyond the free storage period. These are caused by delays in organizing inland transport to remove goods from port storage; delays caused by complex documentation and bureaucratic procedures at each interchange point; lack of suitable cargo-handling equipment; delays in Customs inspections.

(d) In many countries documentation systems are complex and cumbersome; officials are over-zealous and administrative systems are paper-based, time-consuming and repetitive. There are too many documents to complete and too many agencies from which approval, licences and/or permits must be obtained.

(e) The insistence by Customs authorities that goods be cleared at the port of import. The necessity for traders and carriers to pay Customs bonds and guarantees on the value of goods before containers are allowed to travel to inland destinations inevitably causes delays. Goods in transit to neighbouring countries suffer border delays imposing additional costs on traders.

(f) The carriers' insistence on bonds or guarantees being paid before containers are allowed inland, claiming that containers are sometimes "lost" up-country or delayed for several weeks (even months), during which time they cannot be used for other revenue-earning journeys.

(g) Informal and illegal payments made at various stages of the transport journey to facilitate the movement of goods and avoid delays in transit. Individuals have the ability to delay goods if illegal payments are not made by traders or their agents.

Solutions:

(a) Improve the frequency, utilization and reliability of inland transport. Liberalize the provision of transport services and use financial measures (e.g. tariffs) to induce traders and transport operators to move cargo quickly. Improve cooperation between the various parties involved through better communications systems and information flows.

(b) Arrange for facilities to hold empty/recirculation containers in ICDs up-country. Alternatively, negotiate reasonable repositioning rates with transport operators/carriers.

(c) Simplify, streamline and harmonize trade facilitation procedures; improve Customs inspection procedures; provide "single window" calling points at the port to deal with all administrative formalities and procedures; improve information flows and communication between parties.

(d) Improve documentation systems by drastically reducing the number and complexity of documents and documentary procedures; introduce EDI, adopt the ASYCUDA system and the wider use of computerized information systems. Rationalize the number of agencies involved in trade procedures and regulations.

(e) Prepare new Customs regulations that permit goods to move within the country (under bond) and allow clearance at ICDs or importer's premises. Simplify procedures for lodging bonds and guarantees.

(f) Allow carriers to provide inland services (carrier haulage), perhaps in joint ventures with local transport interests. Tighten security and inland tracking systems to reduce the likelihood of loss or delays in container recirculation.

(g) Remove or amend complex Customs, documentary and other regulations, so as to eliminate possibilities for corrupt employees to demand informal payments. Provide adequate salaries for public sector employees, including incentives for efficiency, rather than allowing payments for inefficiency. Improve procedures for detecting corruption.

B. Transit time costs

1. Interest charges and inventory costs

20. Inland transport services are unreliable in many developing countries and transport operators do not provide consistent, scheduled services to traders. This causes additional costs and delays for shippers and prevents them from responding quickly to market changes and opportunities. Long transit times inevitably increase traders' transport costs through the payment of high interest rates on working capital. Traders' capital is also tied up in stock inventory, because of the risk of "stock-out" arising from the slowness and unreliability of transport.

Causes:

- (a) Fragmented transport operations resulting in slow and unreliable services.
- (b) Complex administrative and documentation procedures adding to delays and unreliability. Unpredictable delays for Customs and documentation clearance.
- (c) Foreign exchange controls and traders liquidity problems.
- (d) Frequent breakdowns of road vehicles and rolling stock and congestion within transport networks.

Solutions:

- (a) Develop "third party" transport providers' companies that will manage the total transport operation locally and overseas, and that will schedule and plan shipments carefully.
- (b) Simplify and harmonize administrative and documentary systems and streamline facilitation procedures.
- (c) Develop multimodal transport operations, introduce logistics systems or improve physical distribution management, and speed up transport, removing the causes of unreliability.

2. Delays in payment to traders

21. Payment is not made until evidence of shipment has been received and a B/L has been issued - often many weeks after the goods have left the farm or factory. This time-lag adds to traders' costs and puts pressure on their liquidity.

Causes:

- (a) Slow and unreliable transport services.

- (b) Errors in the preparation of L/Cs, shipping and other documents.
- (c) Administrative and documentary delays.

Solutions:

- (a) Improve the reliability of transport and reduce transit time through greater management efficiency.
- (b) Encourage full multimodal transport, in which the letter of credit names the inland location (ICD, factory, etc.) as the point of shipment.
- (c) Invoke the ICC Uniform Customs and Practice for Documentary Credits (UCP/ICC 500) and use the appropriate INCOTERMS.

3. Penalties for late delivery of goods

22. Penalty clauses in contracts are triggered because goods are not delivered when expected; there is also damage to the supplier's reputation, with a loss of future orders. Late delivery causes markets to be missed; this applies particularly to high-priced and seasonal goods.

Causes:

- (a) Protracted and unreliable inland transport resulting in goods missing nominated vessel sailings.
- (b) Documentary and other administrative delays at all stages of the transport system.
- (c) Inadequate strategies and planning of physical distribution by traders.

Solutions:

- (a) Improve transport speed and reliability and introduce multimodal transport.
- (b) Simplify documentary and administrative procedures.
- (c) Examine alternative distribution strategies for traders, perhaps holding strategic stocks in the country of import.

C. Costs from loss, damage and delays

1. Damage to goods in transit

23. In many developing countries there is a high incidence of damage to goods when in transit. Delays in transit also contribute to the deterioration of goods during transport.

Causes:

(a) Poor quality of packaging and packing and lack of protection against weather damage.

(b) Poor stowage of goods in containers; frequent handling of non-containerized cargoes; lack of care during cargo-handling and stowage. Lack of appropriate cargo-handling equipment.

(c) Long transit times, especially of perishable goods, and the poor quality of storage areas in ports and up-country.

Solutions:

(a) Improve the supply and quality of local packaging materials, prepare packing guidelines and provide training workshops on packaging and packing.

(b) Provide advice, in the form of manuals and guidelines, to traders on packing of cargoes (e.g. ISO, IMDG recommendations) and improve, through training, the skills of those involved in the handling of goods.

(c) Promote containerization and door-to-door services which reduce handling to a minimum.

2. Loss of goods in transit

24. There are high levels of loss of goods in transit. The reputation of traders abroad and the opportunities for trade expansion are often damaged by such losses; customer satisfaction is severely affected.

Causes:

(a) Lack of security, allowing often highly organized theft, pilferage and banditry in the total transport chain; corruption, including opportunistic theft.

(b) Poor tracking of cargo and frequent stops and delays at border points.

(c) Road vehicles and rail wagons not constructed with security in mind.

Solutions:

(a) Governments must promote safety and security by tightening traffic regulations and vehicle standards, and by issuing registration licences.

(b) Use of door-to-door, containerized transport; promote multimodalism.

(c) Improve cargo-tracking procedures and the security of all transport modes.

3. Delays in transit

25. Delays along the transport chain are frequent and unpredictable. In Mali, for example, delays in port (due to slow cargo handling) and in Customs clearance and document handling have added 29-45 per cent to total transport time from origin to destination - more than the sea leg. 7/ In Pakistan, port delays in Karachi are estimated to add US\$ 15 million a year to traders' costs for containerized goods alone. 8/ Poor cargo handling in ports is a major contributory factor but delays also occur at other stages in the transport chain.

Causes:

- (a) Cargo lies in port awaiting processing, clearance of documents, etc. or because documentation is incomplete and prone to error.
- (b) Frequent and unnecessary police checks; delays at border crossings.
- (c) Lack of coordination of multimodal transport; transport services not integrated.
- (d) Shippers have difficulty tracking the movement of their cargoes from origin to destination because transport operators have poor information, and telecommunication systems are inadequate or in poor condition.

Solutions:

- (a) Simplify, harmonize and streamline trade facilitation procedures.
- (b) Encourage the introduction of EDI and promote the establishment of trader community information networks and links with freight forwarders, ports, etc.
- (c) Develop computer software (e.g. ACIS) for use by transport operators in tracking cargo, and distribute it to countries, organizations and Trade Points.
- (d) Improve the maintenance of existing communication networks and instal new, technically advanced systems.

4. Costs of accidents occurring during transport of goods

26. Accidents occurring during the carriage of goods inevitably put up transport costs. A World Bank study concluded that this adds some 2 per cent to the cost of transport for users in Africa. 9/

Causes:

- (a) Poor quality of roads, railways, port and inland facilities. The wrong type and poor quality of transport vehicles and the lack of appropriate handling equipment.

(b) Poor maintenance of the transport infrastructure.

(c) Poor quality of drivers and other equipment operators.

Solutions:

(a) Improve the maintenance of the transport infrastructure and investment in suitable vehicles.

(b) Update traffic regulations and rules, e.g. imposing weight and speed restrictions; introduce licensing of transport drivers.

(c) Provide training for drivers and equipment operators.

D. Conclusion

27. The consequences of these aggregated costs to individual traders and to the economies of developing countries are extremely serious. For example, total transport costs to Burkina Faso's international trade in 1988 were US\$ 133 million - 23 per cent of the value of its imports and exports and 7 per cent of its GDP. 10/ The land transport portion of that bill was roughly US\$ 73 million (4 per cent of GDP), while the ocean shipping costs were estimated as US\$ 33 million. For Niger, the generalized transport costs of international trade in 1988 were US\$ 150 million - 37 per cent of the value of total imports. 11/ Land transport contributed US\$ 67 million and ocean shipping US\$ 36 million. In 1987, the generalized costs for transit traffic to and from Mali were about US\$ 100 million - about 5 per cent of GDP. 12/ In Zaire, the costs to the buyer for imports delivered to Kinshasa are on average 1.8 times the price at source. 13/ For exports the ratio is 1.2 for copper, 1.7 for lumber and 2.8 for coffee with a weighted average of 1.3 times. The difference between the total value of Zaire's foreign trade at the points of origin and destination is US\$ 1.7 billion. 14/ Transport accounts for US\$ 586 million of this cost, of which US\$ 258 million is for shipping and US\$ 328 million for inland transport. Financing fees and immobilization time costs US\$ 407 million, because of slow transport and formalities.

28. A series of studies have shown that transport costs absorb a large share of the export earnings of developing countries, and that freight factors (the ratio of freight rate to product value) are higher for exports from developing countries than for products from other export sources to the same import market. 15/ It is even suggested that transport costs are a bigger impediment to some trades than Most Favoured Nation tariffs.

29. There can be no doubt, therefore, of the great value to traders and to national economies of reducing the various costs associated with cargo transport. There is tremendous scope for improvement, which will not only have a positive impact on profits to be derived from existing trade but also reveal a considerable latent demand for additional trade, at present inhibited by transport costs.

II. THE QUALITY OF TRANSPORT

30. Many service characteristics contribute to what traders perceive as "quality of service", the lack of which presents major obstacles to efficient trade. The major concerns are:

- availability of service;
- reliability of service;
- regularity of service;
- service speed;
- cargo tracking and information;
- security.

31. The general difficulty with respect to transport quality is that, to small and medium-sized traders in many developing countries, suitable transport for their goods is just not available when and where they want it (a situation that is slightly better in Asia than in Africa). The precise nature of the problems and the severity of the difficulties vary from transport mode to transport mode, and so modes will be considered separately here.

A. Maritime transport

32. Trade links are still largely dominated by shipping services between developed market-economy countries, particularly the transatlantic, transpacific and Europe-Far East routes. Direct, main line shipping services between developing countries are not generally available with the exception of the newly industrialized countries of South-East Asia which have developed a flourishing intraregional trade and reasonable links with other regions. The main reasons for the paucity of services between developing countries is the comparatively low volumes of trade between them. In the South-North trades, developing countries are increasingly being treated as way ports - en route to the major markets - and often have to rely on transshipment services to reach overseas markets. This trend is likely to persist, as vessel sizes increase and as development continues in hub (pivot) port and feeder services. The availability of shipping services, while satisfactory for most cargoes, may be inadequate for some commodities. Additionally, the wider application of FAK rates will shut out low-value cargoes.

33. With the exception of East Asia, the South-South trades and intraregional routes (feeder, coastal and short sea legs) are poorly serviced. In Asia, 55 per cent of trade is intraregional, and only 45 per cent is with other parts of the world. ^{16/} In Africa, 94 per cent is with countries outside the region (mainly developed countries). In North Africa, only 0.7 per cent of trade is within the region. ^{17/} South-South interregional shipping services are limited to a few countries of origin and destination, e.g. Hong Kong, Singapore, Republic of Korea, Brazil; these are connected by regular end-to-end services and regional feeder services. In Africa, there

are just a few services from North Africa to West and Central Africa and to East and Southern Africa; coastal, short sea and intraregional services are otherwise very poor.

Causes:

(a) Dependence on shipping services primarily geared to connect developed countries, mainly the three main trading blocs.

(b) Insufficient traffic volumes (initially) to justify establishment of viable (economic) services and to sustain an acceptable frequency; this results in a lack or reduced range of services outside the main shipping networks.

(c) Variability in the available capacity on certain routes (North-North and North-South), particularly affecting way port traders.

(d) Development of load centring and main line/feeder services to realize economies of scale in shipping; ports in some developing countries cannot accommodate the large vessels used on main line routes; poor port cargo handling efficiency discourages calls by main line vessels; cargo volumes insufficient to justify calls by main line vessels.

(e) There are few regional/coastal/feeder services in many regions resulting in poor inter- and intraregional connections.

(f) The failure of the national merchant marine to contribute to providing shipping services at the inter- and intraregional levels.

Solutions:

(a) Promote services on routes that would justify direct links.

(b) Develop the entrepreneurial skills of local people and encourage regional cooperation to establish commercially viable regional/short sea/feeder shipping services as joint ventures. Provide government inducements to encourage the setting up of shipping services and encourage the private sector to invest in shipping.

(c) Shippers should negotiate favourable rates directly with shipowners for indirect services using existing North-North and North-South routes and ensure adequate services also for commodities with special transport needs.

(d) Promote slot charter agreements and transshipment services at required frequencies.

(e) Encourage cooperation between traders to consolidate LCL shipments for economy and convenience, and to negotiate better rates.

(f) Promote the exchange of information and market intelligence between traders to identify opportunities for cooperation in obtaining shipping and

other transport services. Develop databases for maintaining information on available shipping services, particularly relating to South-South opportunities.

(g) Traders, acting together, should discuss their South-South transport needs with local transport companies, ship operators and entrepreneurs interested in investing in shipping.

(h) Traders should enter into agreements on the minimum quantities required to be shipped, to justify the establishment or improvement of services.

B. Inland waterway transport

34. Inland waterways are not commercially developed in many regions although there is considerable potential for the development of systems in many countries, offering good linkages and considerable economic (cost) benefits. Inland waterway transport does not provide adequate frequency of service for non-bulk cargoes; carriers do not normally operate on strict schedules and are unable to respond to peak or seasonal transport needs.

Causes:

(a) Inadequate depth of water (often seasonal) to accommodate economically sized vessels, because of the cost and lack of development of rivers/canals and/or poor maintenance.

(b) Even where systems exist, they may be greatly under-used and under-exploited because of the lack of suitable inland waterway craft and navigational aids (restricting movement to daylight hours and making inland waterway transport a high risk option).

(c) Low utilization of existing craft because of poor fleet management.

(d) Large numbers of small-scale operators, making it difficult to provide comprehensive, scheduled and reliable services.

(e) Craft and handling systems are mainly suited for bulk transport and there is a lack of modern and appropriate shore handling facilities and equipment.

Solutions:

(a) Governments need to invest in the development of inland waterway networks and the purchase of suitable craft.

(b) Channels and navigational aids should be adequately maintained; shore handling facilities need to be constructed and equipped.

(c) Promote regional cooperation to provide inland waterway services and encourage the development of common carriers through mergers and joint ventures.

(d) Establish regular and reliable inland waterway services, where demand justifies these; make better use of existing craft through improved fleet management and training.

(e) Through trader cooperation, negotiate special rates for the handling of consolidated consignments suitable for the level of service provided by inland waterway transport.

C. Railways

35. Rail transport is inflexible for goods transport applications; in many countries it does not provide the availability, frequency and regularity of services demanded by traders. For example, rail tariffs often still discriminate against containers, which are seen as an inconvenience by many railway managers; most containers are packed and unpacked in ports and the cargo is moved between the port and inland locations in conventional loose form. In Pakistan, for example, over 90 per cent of containers are packed/unpacked in Karachi; in India less than 5 per cent of cargo is moved inland in containers. 18/

36. Transit times from origin to destination are long on many routes, particularly for land-locked countries; turnaround times are excessive, reducing the level of utilization of locomotives and rolling stock. It has been estimated that in Zaire, if turnaround times could be improved by just 1.5 days per wagon, savings of US\$ 2.2 million a year could be achieved. 19/

37. The lack of a network of ICDs is an important factor in the under-use of railway systems, particularly where transport distances between the coast and inland areas of consumption or production are long. This is particularly so in Africa. India has recognized the need to embark on the development of a network of 22 ICDs and 56 related CFSs to promote intermodal transport. 20/

38. Partly as a consequence of inflexibility, the volume of cargo moved by rail is generally declining and most railways are losing profitability. Between 1950 and 1980, rail traffic in Nigeria decreased from 87 per cent of imports to 5 per cent, and from 76 per cent of exports to 11 per cent (offset by road traffic). 21/ In Pakistan, rail freight declined from 11.8 million metric tons in 1985/86 to 7.7 million metric tons in 1990/91 - a fall of 35 per cent. 22/ It is significant that the rail networks of most developing countries have not been augmented for over 30 years; because of poor maintenance, they have in some cases even contracted.

39. A similar contraction has occurred in the number of locomotives and rolling stock; in Pakistan, for example, locomotive numbers have fallen from 1,071 (1965) to 596 (1992); the wagon fleet has declined from 35,842 (1989) to 30,369 (1992); there has been no new rolling stock purchased since 1987. 23/ Networks still reflect colonial patterns; there is little connection between neighbouring countries; for example, the five countries in the North African region that have railways are not connected because of gauge differences or political difficulties. 24/ There are two rail gauges in Tanzania and three in Pakistan, adding to the difficulties of running an integrated network.

Causes:

(a) Limitations of existing rail networks (poor connectivity to large areas of the country, too many rail gauges, single track systems which limit cargo-carrying capacity), and inadequate rolling stock in terms of the number of wagons and suitability of wagon type (especially for containers).

(b) Tracks and rolling stock poorly maintained with a high level of obsolescence in the inventory of locomotives and rail wagons.

(c) Poor tracking and other information systems so that the position of rolling stock cannot be monitored; poor stock utilization. Use of rail wagons for storage instead of productive transport.

(d) Poor frequency, regularity and reliability of rail transport because of the failure to establish and maintain scheduled services and slow turn-around of wagons.

(e) Rail systems not linked to ICDs and/or CFSs or, where they are, storage areas too small to cope with the traffic. This results in a lack of door-to-door operations.

(f) Failure of railways to provide a flexible, multimodal transport system (utilizing block trains, ICDs, onward delivery, etc.) and linking ports with inland terminals.

(g) Railways have become high-cost operators, with high staffing levels, inefficient operations and management, and poor marketing.

Solutions:

(a) Improve the maintenance of track and rolling stock, purchase new rolling stock and expand the network where traffic volumes justify this. Allow and encourage the participation of the private sector and foreign investment in the provision of rail services and the establishment and management of ICDs and CFSs.

(b) Improve the utilization of existing locomotives and rolling stock through the application of tracking and other information and management control systems, such as ACIS.

(c) Establish regular block train services (perhaps allowing users to lease tracks and provide their own rolling stock) and a network of ICDs and CFSs located at strategic points to improve the availability and regularity of door-to-door services.

(d) Set up modern rail terminals in ports and provide appropriate cargo-handling equipment at marine and inland terminals.

(e) Revise legislation to allow MTOs to operate and to permit through-rail-transport to provide reliable integrated services with good links to distributor roads.

(f) Improve the scheduling and management of services to eliminate delays and encourage the establishment of integrated door-to-door services, using a combination of road, rail and, where appropriate, inland waterway transport.

(g) Make railway systems more competitive, by restructuring their management, introducing commercial management methods, and improving managers' skills through training.

(h) Encourage traders to discuss their problems and requirements with the railway organizations.

D. Roads

40. The road transport industry in developing countries does not provide an appropriate range of frequent and regular services. Effective, efficient road transport infrastructure and facilities are often not available to shippers. Although a high proportion of cargo is carried by road (80 per cent in Africa), 25/ the road network in many developing countries is poorly developed. Developing countries cover over 60 per cent of the world's land area and contain more than 70 per cent of the world's population, but in the 1980s they had only 23 per cent of road mileage and 22 per cent of road vehicles. 26/ Africa has only 5 kilometres of road for every 100 km² of area, Latin America has 12 km² and Asia has over 18 km². 27/ Of the 650,000 kilometres of roads in Africa, only 34 per cent are paved; the condition of only 45 per cent is considered good; many of the roads are deteriorating steadily through a lack of maintenance and are in danger of becoming unstable. 28/ Already about 85 per cent of rural roads are rated as being in poor condition. 29/ Land-locked countries are particularly badly served by roads. In spite of the relatively small road vehicle fleet, much of it is under-used because of poor organization and management; in the 1980s, it was estimated that 70 per cent of the African trucking fleet was idle at any one time, because of poor coordination of services and the restrictive regulatory environment. 30/ The consequence is high road transport costs in many developing countries, particularly in Africa.

Causes:

(a) The road transport industry is poorly organized. In some countries it is dominated by large numbers of small driver-owner companies while in others, state owned monopolies control road transport, restricting competition and capacity, and not responding to traders needs. The emphasis in government policy is often to protect transport operators and not to promote the interests of traders.

(b) Connectivity is poor in many areas (particularly with land-locked countries), and the road network does not reach the points of production, manufacture and use of goods.

(c) Many major and secondary roads are in a very poor state because of lack of maintenance, management and provision.

(d) There is a shortage of suitable road vehicles, particularly for container traffic; existing fleets are poorly utilized because of poor management. Operators fail to adhere to schedules, and liability regimes and safety and security standards are low.

(e) Cabotage policies restrict the use of trucks from one country operating in another which results in additional handling of cargo and extra transport costs. There are long delays at border crossings and terminals.

(f) There is a lack of harmonization of road regulations in a region.

(g) Road transport is used for inappropriate and uneconomically long distances, for journeys which should be covered by rail.

Solutions:

(a) Establish large and competent road transport operators, possibly through mergers, and strengthen road transport organizations. Encourage private sector participation in the provision of road transport services.

(b) Repair and maintain existing roads and expand and upgrade the network to increase road transport capacity.

(c) Remove investment and other constraints (foreign-exchange controls, import duties, etc.) to allow transport operators to obtain new vehicles.

(d) Revise rules, regulations and/or legislation to establish a legal regime covering liability, safety, operations, etc., for road-transport operators. Adjust tariffs to encourage carriage of goods by rail over long distances.

(e) Improve the scheduling of road transport services and the tracking of vehicles to increase utilization, efficiency and security.

(f) Provide training schemes to improve the quality of management, operations and maintenance of road transport services.

(g) Remove cabotage restrictions and encourage international cooperation aimed at harmonizing road transport regulations at the regional level.

E. Ports

41. Although there has been considerable investment in port infrastructure and modern terminal facilities in the past decade, the cargo-handling capability and performance of many developing countries' ports is poor. The development of new facilities to meet the requirements of bulk and unitized shipping has been slow in some countries and there is little competition in most ports for the provision of cargo handling and other services. At some ports, cargo is still handled at conventional facilities, slowly and inefficiently. Where new infrastructure has been provided, performance is often well below international standards; plant and machinery is poorly maintained; manning levels are excessive; these add to inefficiency and high cost of cargo handling.

Causes:

(a) The continued survival of old obsolete ports and facilities and too few modern terminals with mechanized systems of cargo handling.

(b) Poor use of existing port capacity; shortage of suitable handling equipment and inadequate storage space.

(c) The persistence of outdated organizational structures and management practices, resulting in a lack of competition and poor employee accountability and incentives.

(d) Poor maintenance of infrastructure, plant and equipment.

(e) Poor cargo-handling performance and the failure to develop interchange facilities for the efficient transport of cargo between maritime and inland transport.

(f) Poor quality of port management.

Solutions:

(a) Liberalize the ports to allow private terminal operations and provide competition to encourage efficiency.

(b) Develop new specialized terminals, where appropriate, with the capacity to handle the trade of the country/or region, and invest in new handling equipment and facilities. Convert and adapt existing obsolete port capacity to new uses.

(c) Improve maintenance management.

(d) Encourage ports to establish efficient interchange facilities and supporting services (e.g. freight villages) where a range of complementary activities (packaging, groupage, packing into containers, documentation, stock holding, etc.) can be offered.

(e) Improve the professional skills of port employees.

F. Air

42. There is a growing use of air and sea/air combinations for the movement of goods, either because of the poor quality of surface transport in the export country, or because some trade, while not able to bear the pure air freight costs, may benefit from the combination of shorter transit time despite the somewhat higher freight costs. About 35 per cent of the exports for one region of a major Asian trading nation now are shipped by air, compared with 7 per cent in 1980, so as to ensure that tight delivery schedules are met. 31/

Causes:

- (a) Poor quality, slow and unreliable surface transport options.
- (b) Congestion at ports; non-availability of regular or more frequent shipping services.
- (c) Tight delivery schedules or the need to lower the risk of product deterioration during transport.

Solutions:

- (a) Speed up surface transport and improve its reliability.
- (b) Encourage door-to-door multimodal transport services.
- (c) Improve air transport facilities and services for high value and perishable goods.

G. Multimodal transport

43. In many countries there is confusion over legal liability and responsibility for a particular transport operation, often owing to the lack of integrated transport services. There is lack of coordination between road, rail and inland waterways transport services and of transport services crossing the borders of neighbouring countries, restricting the achievement of economies of scale. Government regulations and controls often prevent the establishment of MTOs and other comprehensive services, particularly by prohibiting the movement inland of containers under bond. Furthermore, in many countries, there is no legal regime dealing specifically with multimodal transport. In many developing countries, goods transport networks are not planned, resulting in a shortage of transport, storage capacity and distribution centres in the major areas of production and consumption. As a consequence, cargo is often held in inadequate facilities, leading to product deterioration and loss, or it is left in rail wagons or road vehicles, tying up urgently needed transport capacity. In general, the quality of advice and assistance given to traders by many local transport providers and/or freight forwarders is not of a sufficiently high standard to help promote a country's exports.

Causes:

- (a) Many independent parties are involved in the transport chain and they fail to provide an integrated service.
- (b) Failure to develop a modern, appropriate legislative framework and suitable regulations governing multimodal transport operations.
- (c) Failure to develop or implement plans to create an integrated goods transport network with adequate regional distribution centres and appropriate storage facilities.

(d) The lack of professional expertise of freight forwarders in many countries and the lack of regulation of this sector of the industry.

Solutions:

(a) Encourage the establishment of multimodal transport operators by providing guidelines and model codes/laws/regulations covering Customs regulations and procedures, road transport, multimodal transport, legal liability, etc., for enactment and implementation by Governments.

(b) Encourage greater participation of the private sector and the creation of large transport operators with the freedom and autonomy to set up effective door-to-door transport systems.

(c) Governments should adopt planning strategies that encourage door-to-door (multimodal) services. Governments should become regulators, rather than providers of transport, and promote the provision of efficient services, instead of protecting inefficient public transport providers.

(d) The private and public sector should jointly establish Trade and Transport Facilitation Committees to promote the free discussion of common trade and transport-related problems, with a view to finding solutions acceptable to all concerned.

(e) Improve the standing and recognition of freight forwarders and other agencies in the transport and trade sectors. Establish accreditation schemes, and set up professional and financial barriers to entry to the profession in order to encourage competence and reliability. Develop, through training schemes, the ability of freight forwarders and transport operators to provide a full range of transport and distribution services. Encourage freight forwarders to become members of Trade Points.

H. Conclusion

44. Massive investment is needed to rehabilitate the existing transport infrastructure and facilities in developing countries and to develop new networks and technology in order to improve the quality of service to traders. For example, in Africa, an estimated US\$ 49 billion is needed so as to rehabilitate all the paved roads, 70 per cent of the unpaved roads and 50 per cent of the feeder roads, while another US\$ 7.8 billion is needed annually for maintenance. ^{32/} In India, the estimated investment requirement to the year 2000 is US\$ 2.5 billion for ports, US\$ 6.8 billion for railways, US\$ 6.4 billion for highways and US\$ 0.75 billion for ICDs. ^{33/} Many developing countries need capital for modernizing railway tracks, building roads and purchasing purpose-built wagons and trucks for carriage of freight (particularly containerized cargo) and for the installation of efficient communication and tracking systems.

45. Although substantial investment is required, it is not a panacea for solving all developing country transport problems. The first task must be to increase the utilization and performance of the existing infrastructure and facilities; there are a number of actions that Governments, transport providers and traders can take to make a significant improvement in the

quality of transport services offered to traders. The suggested developments in transport reorganization, logistics and information systems set out in this paper are directed at cooperatively managing and controlling distribution channel relationships for the benefit of all parties involved in trade and transport. The aim is to create new relationships and partnerships between transport and distribution providers and users, leading to the development of integrated systems - exactly the sorts of processes that have been so successful in the market economy countries.

III. RECOMMENDATIONS

46. The preceding chapters have identified a large number of individual problems and possible ways of solving them. The present chapter attempts to set out a series of recommendations which are directly relevant to the existing and future trade points. The recommendations are presented as a series of possible actions aimed at the commercial parties, Governments and intergovernmental organizations.

A. Recommendations to commercial parties

(a) Actions by transport providers

- (i) Focus on areas where their competitiveness is optimal; identify and eliminate non-productive areas; identify new areas for action, such as information systems, total logistics services; increase their capital base, possibly through mergers or joint ventures; create or strengthen existing national transport organizations; institute regular exchanges with their clients, subcontractors, competitors, financial institutions and those governmental departments including Customs, that might influence their performance.
- (ii) Furthermore, they should: improve their managerial skills; implement modern recruitment and promotion procedures; introduce training at all levels of staff; and simplify office routines and documentary procedures.
- (iii) At the marketing level, they should establish efficient sales departments and institute proper marketing procedures; provide operational cargo tracking data to clients; subcontractor agreements and tariff structures should be reviewed and they should be prepared to quote proper door-to-door rates. These activities should be instituted at Trade Points where these exist.
- (iv) Actions should be taken at the operational level with regard to implementation of modern practices such as ensuring that adequate transport capacities in terms of both frequency and reliability; development of infrastructure such as ICDs, CFSS and other groupage facilities; investment in necessary equipment; introduction of planned maintenance; introduction of EDP/EDI and acquisition of appropriate software including systems for the

tracking of vehicles and cargo (e.g. through the use of the Advance Cargo Information System [ACIS]), transmission of manifests etc.; and participation in port/maritime community information networks.

(b) Actions by transport users

- (i) Identification of main (regular) clients and transport providers in order to institute close consultations on the most efficient/cost-effective transport chain; accessing transport operators' tracking systems; agreeing with buyers/sellers, when using multimodal transport (door-to-door), to switch from unsuitable fob/cif INCOTERMS to new, multimodal transport-friendly fca/cip terms (free carrier/carriage and insurance paid to); participate fully in shippers' councils, National Trade and Transport Facilitation Committees and other representative bodies that promote efficient trade and transport services such as Trade Points; access to transport providers' data information systems (ACIS) tracking their cargo.
- (ii) Scrutinize carefully the level of services offered by transport providers presently used and compare these to services offered by others; institute regular consultations with all transport providers.
- (iii) Furthermore, they should: increase their capital base; improve their managerial skills; implement modern recruitment and promotion procedures; introduce training at all levels of staff; simplify office routines and documentary procedures; through coordinated efforts with other transport users, strengthen their bargaining position vis-à-vis transport providers.
- (iv) Become more involved in transport issues by: providing information on cargo clients; identifying points where cargo may become damaged, then seek to eliminate the reasons for such damage, alternatively change transport packaging, cargo care procedures and/or transport routes/providers to avert future damage to cargo; use local Trade Points or National Trade and Transport Facilitation Committees to institute regular exchanges of views on transport issues with clients, competitors, financial institutions (banks and insurers) and governmental agencies including Customs.

(c) Actions by other commercial parties

Implement recognition of the latest version of ICC's Uniform Customs and Practices for Documentary Credits (ICC 500) and encourage traders to use new multimodal transport-friendly INCOTERMS such as fca/cip; consider extending credit facilities to cover inland transport costs of imported goods; and design and encourage traders to take out insurance policies tailor-made for multimodal transport.

B. Recommendations to governmental departments (para-statal organizations and Customs)**(a) Actions on transport policy issues (national level)**

- (i) Modernize transport laws/regulations particularly through the definition of regulatory items which will foster the development of logistics chains, e.g., through the establishment of pricing principles which will encourage the use of containerized shipment and thus help the development of multimodal transport. These principles should cover, for example, rates for public and private services as well as international door-to-door tariffs which should take into account not only traditional factors such as distance, weight and value of the goods, but also factors relating to the quality of service such as regularity, frequency and the volume of trade.
- (ii) Promote the establishment of National Trade and Transport Facilitation Committees (possibly with participants of Trade Points) to: stimulate cooperation between national actors in the transport chain, encourage all private sector actors, including freight forwarders etc., to participate in these committees.
- (iii) Implement specific transport operations improvements such as: the formation of block-train services, granting of container terminal concessions to mixed-economy companies that operate according to commercial practices (rather than to legal norms governing public enterprises) or to private companies; provide guidelines to update commercial banking and insurance practices in line with international practices recommended by the ICC; and stimulate private investment in training.

(b) Actions on transport policy issues (subregional level)

- (i) Develop subregional cooperation projects regarding harmonization of transport regulatory policies and legal regimes to find multilateral solutions to existing problems, particularly in the field of Customs transit.
- (ii) Establish subregional databases on transport (from ACIS and other sources).
- (iii) Establish subregional meetings of National Trade and Transport Facilitation Committees.

C. Recommendations to intergovernmental organizations

47. While most earlier recommendations can be undertaken by the commercial parties in cooperation with the relevant governmental agencies, there may, in certain areas, be a need for assistance from intergovernmental organizations. The following recommendations are therefore made:

Intergovernmental organizations may be asked to provide assistance with the implementation of specific actions such as advice:

- to Governments and commercial parties on specific measures which will facilitate the introduction of multimodal transport in a country or subregion;
- on modifications to organizational structures for (parastatal) companies to improve their performance;
- on the creation of National Trade and Transport Facilitation Committees; and
- on the organization of awareness campaigns.

D. Implementation of the suggested recommendations

48. The recommendations made above to Governments and commercial parties need to be assessed in terms of the local context. In this evaluation process, international organizations, both intergovernmental and non-governmental, will have important roles to play in assisting developing countries' decision-makers in two possible ways:

(a) By providing and monitoring technical assistance and training in specific areas, such as those mentioned in this report; and

(b) By directly creating an awareness of international multimodal transport issues, by preparing reference documents for decision-makers on key issues, and by keeping these decision-makers abreast of technological developments.

49. The two approaches are complementary. One refers to actions in the field, whereas the other focuses on desk activities to support decision-makers' consideration of these issues. An essential feature of this process is cooperation between the interested parties. This cooperation could be promoted through the formation of a committee to channel proposals and decisions on facilitation to the proper institutions. This type of committee would be what above has been termed as "National Trade and Transport Facilitation Committees" including technical subcommittees as appropriate, e.g., on computerization, legislation etc.

Notes

1/ See, for example, UNCTAD (1991) Review of Maritime Transport. United Nations. New York; UNCTAD (1992) The role of transport in trade between developing countries Geneva; and UNCTAD (1990) Information material for shippers to make the most efficient use of multimodal transport, Geneva.

2/ UNCTAD (1991), Review of Maritime Transport, op cit.

3/ UNCTAD (1991), *ibid.* p. 55.

4/ UN/ECA (1990a), UNTACDA II, Strategy Paper of the Roads Subsector Working Group, p. 4.

5/ UN/ECA, (1990a), *ibid.*, Annex A, p. 2.

6/ Peters, H.J. (1991), India's growing conflict between trade and transport, World Bank.

7/ de Castro, C.F. (undated), Transport and trade facilitation guidelines, SSATP, p. 18.

8/ Data supplied by the Pakistan Shippers' Council.

9/ UN/ECA (1990a), *op. cit.*, p. 7.

10/ de Castro, C.F. *op. cit.*, p. 18.

11/ *Ibid.*, p. 19

12/ *Ibid.*, p. 18.

13/ *Ibid.*, p. 19.

14/ *Ibid.*, p. 19.

15/ See, for example, G.P. Sampson, and A.J. Yates, (May 1977). Tariff and transport barriers facing Australian exports; and *ibid.* (May 1978). "The incidence of transport costs on exports from the UK". Published in the Journal of Transport Economics and Policy. Also, H. McFarland, (July 1985) "Transport costs for US imports from developed and developing countries". The Journal of Development Studies, pp. 562-571; and R.M. Conlon, (March 1982) "Transport costs and tariff protection of Australian manufacturing". The Economic Record, pp. 73-81; also A.J. Yeats, "A comparative analysis of the incidence of tariffs and transportation costs on India's exports". The Journal of Development Studies, October, pp. 97-107.

16/ UNCTAD (1989), Review of Maritime Transport, United Nations, New York.

17/ UN/ECA (1986), Study on the harmonization and coordination of the various transport modes in the North African Subregion, Addis Ababa, p. 13.

18/ UNCTAD (1992), Multimodal transport and trade facilitation programme for Pakistan, p. 15.

19/ UNCTAD (1992), Development and implementation of ACIS in PTA member States, p. 13.

20/ Information supplied by the Container Corporation of India (CONCOR).

21/ UN/ECA (1990a), op. cit., Annex A, p. 2.

22/ UNCTAD (1992), op. cit., p. 22.

23/ UNCTAD (1993), A second report on the multimodal transport and trade facilitation programme of Pakistan, p. 25.

24/ UN/ECA (1986), op. cit., p. 79.

25/ UN/ECA (1990a), op. cit., p. 1.

26/ United Nations (1980), Report on the state of transport and communications among developing countries, New York, p. 7.

27/ UN/ECA (1990a), op. cit., p. 4.

28/ UN/ECA (1990b), UNTACDA II Road and road transport strategy paper, p. 1.

29/ UN/ECA (1990b), op. cit., p. 3.

30/ UN/ECA (1990a), op. cit., Annex A, p. 4.

31/ Peters, H.J., (1991), op. cit., p. 8.

32/ UN/ECA (1990a), op. cit., p. 5.

33/ Peters, H.J., (1991), op. cit., p. 42.

- - - - -