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ROLE OF TRANSPORTATION AND LOGISTICS ON INTERNATIONAL TRADE

The Developing Country Context

September 2003

This publication was produced for review by the United States Agency for International Development as part of the Trade Enhancement for the Services Sector (TESS) Project. It was prepared by CARANA Corporation.

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Prepared by

CARANA Corporation

Delivering Global Development Solutions

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PREFACE

This preliminary report is based on the first phase of a study conducted under the Trade Enhancement Service Sector (TESS) Project, under contract for the United States Agency for International Development, Washington, DC. (Contract No. PCE-I-07-97-00014).

The TESS Project is intended to encourage and support enhancement of the trade and service sectors to promote economic development and country competitiveness. Specifically, the project provides technical support in advancing the understanding of constraints and competition in services sectors such as transportation, and in developing and disseminating best practices for liberalization and enhancing systematic efficiency. More information can be found at www.tessproject.com .

The phase 1 study was compiled by Santiago Sedaca, Team Leader, and Lor Melvin, International Supply Chain Consultant, with the assistance of Brett Johnson, International Trade and Investment Economist.

Executive Summary

Overview

The dramatic integration of the ***international economy provides tremendous opportunities*** for developing countries to achieve economic development through international trade and investment. Not only can countries benefit from the trade of traditional exports, the increasingly global nature of manufacturing networks allows poorer countries to become integral components of international supply chains. In addition, international efforts to ***reduce and remove rules based tariff and non-tariff barriers to trade have increased developing countries' access*** to key industrial country markets by increasing the relative competitiveness of their goods.

While reductions in rules-based barriers to trade have contributed to dynamic export expansion in many countries, recent changes in the international trade regime only level the playing field, ***increasing the importance of non-rules-based drivers of trade competitiveness in developing countries.*** One such key determinant of trade competitiveness is the extent to which goods can be shipped from a factory, warehouse or port in the country of origin to destination markets throughout the world in a timely and cost-effective manner. Unfortunately, many developing countries have ***weak and inefficient transport and logistics*** that lead to longer transit times, problems with predictability and reliability and higher trade transaction costs that in turn undermine competitiveness. Without serious efforts to enhance these transport and logistics systems and the provision of trade support services tied to these systems, these ***developing countries will be unable to take advantage of opportunities provided by global manufacturing networks*** and lower rules-based barriers to trade.

This paper demonstrates how various ***constraints and weaknesses*** in the provision of trade support services ***increase transaction costs*** and ***limit the ability of firms in developing countries to meet the needs of an increasingly complex transport and logistics demands*** of the international economy and thus undermine the competitiveness of traded goods. It also discusses efforts necessary to address these constraints at both the global and national levels. As a ***leader to future initiatives,*** this paper presents a ***road map to the country specific analysis*** of the trade support services sector to facilitate the development of ***national strategies*** geared toward ***enhancing developing countries' trade competitiveness through more efficient transport and logistics systems.***

Demands of the International Trade System

Effectively providing trade support services has always been an important step in maintaining export competitiveness. Today, however, the increasingly complex nature of the international economy has resulted in greater demands on the provision of trade support services. Particularly, these demands stem from integrated ***global manufacturing and production networks,*** **an increasing need for *just-in-***

time logistics, growing usage of ***intermodal transport*** involving one or more modes of transportation (road, air, maritime or rail) and new ***security considerations***. In general, many developing countries do not have the capacity to effectively meet these complex demands, thus limiting their ability to sufficiently integrate into the global economy.

Trade Transaction

As the demands of the international economy become more complex, so do the steps required to complete a trade transaction. At its simplest, the process of international trade is the purchase, shipment and payment for goods. In reality, the process of an international trade transaction is made up of ***multiple (up to 40) steps*** involving a ***range of legal and regulatory frameworks*** **and a** ***myriad of players*** with often-redundant functions. At each step, there are costs that are added to the final value of the good at its destination. Within this context, a number of factors or processes ***unduly raise the costs of transactions*** **and** ***increase the probability of delays*** in developing countries.

Higher Transaction Costs in Developing Countries

Meeting the demands of the international trade system and navigating the ***complex processes of trade transaction requires a range of trade support services*** that include the management and control of freight movements, warehousing and storage of goods, customs administration, transaction documentation and banking and insurance services.

The ***quality, cost, and efficiency of these services*** – and the overall capacity to provide them can have a direct impact on landed costs of goods at port of destination and thus on the overall competitiveness of firms' exporting goods to international markets. In general, goods shipped from developing countries ***face comparatively high transaction costs that undermine their competitiveness*****.** For example, the average cost of transport for developing countries exports is around nine percent of the overall cost of the traded good while the same component costs five percent in developed countries. In landlocked developing countries, this proportion can reach as high as fourteen percent. In many cases, ***higher transaction costs partially negate the benefits of tariff reduction,*** accounting for as much as three times average tariff rate (3.7 percent) applied to industrial country imports since the Post-Uruguay round.

The ***poorest regions of the world often have the greatest reliance on trade in goods*** as a percentage of GDP. The same regions have some of the highest cost trade support services. This is unfortunate, as these economies likely ***have the most to gain, in economic development terms, from further integration into the global economy***. With reductions in tariff and non-tariff barriers opening access to key industrial markets, countries that are unable to reduce their transaction costs will find it *more difficult to reap the benefits* of expanded exports, foreign investment and economic growth.

Drivers of Higher Transaction Costs

Through an analysis of ***primary data obtained by CARANA from transport and logistics sources*** and a ***comprehensive review of transport, logistics and trade facilitation literature***, this study identified a number of key drivers leading to higher trade transaction costs through ***accrued time and financial cost*** in the movement of traded good in developing countries. These include ***drivers tied to different modes of transport*** (maritime, air, or land), the ***provision of auxiliary services*** such as cargo handling and storage and ***consequences of inadequate market competition*** within modal sectors as well as factors surrounding the actual movement of goods that are not involved in direct transportation activities that have a large impact on the overall cost and timeliness of a particular goods shipment. A summary of these drivers is listed below.

- ***Cross-modal*** drivers of higher transport include developing countries' distance from trading partners, low commodity value to transport cost ratios, low export volumes and supply and demand factors.
- Drivers of higher costs related to ***maritime transport*** include anticompetitive practices, directional imbalances, limitations on cabotage (ability to reposition equipment), a reliance on transshipment and feeder services due to international shipping patterns and low export volumes and costly auxiliary services.
- Higher ***air transport*** costs are driven by a reliance on passenger airlines, directional imbalances, changing flight schedules, expensive cargo handling and storage operations, market barriers related to landing rights, anticompetitive practices and differing regulatory environments
- ***Road transport*** costs are driven by domestic transport market conditions, varying road conditions, transit corridor agreements, equipment availability and condition and delays at border checkpoints.
- ***Non-Modal*** drivers of higher transaction costs in developing countries include weak customs procedures, poor dissemination of regulatory information, weak transport intermediary development, underdeveloped logistics services and the costs and availability of banking and financial services.

While the actual combination and magnitude of ***cost drivers vary from country to country*** the overall impact of the issues discussed in this paper are the same: ***less competitive goods***. If drivers of higher transaction costs persist, developing countries will face a ***serious impediment to expanding exports, attracting investment and facilitating economic growth.***

Addressing Trade Support Services in Developing Countries

It is imperative that developing countries, international donors and international trade organizations alike implement initiatives that ***facilitate the provision of lower cost and more efficient trade support services*** in developing countries' trade. Numerous international organizations have recognized the need to facilitate trade movements by ***removing rules based administrative barriers*** that increases the probability of unduly high transaction costs and delays. Global efforts within the World Trade

Organization (WTO), particularly within the General Agreement on Trade in Services (GATS) mechanism may prove to be a ***key avenue to liberalize the international trade support service sector***, which would inevitably lead to more efficient and higher quality provision of these services in developing countries.

Although global efforts will contribute to lower transaction costs and greater competitiveness in developing countries, ***initiatives are necessary at the national level*** to remove institutional, procedural and market impediments that hinder the efficient provision of services as well as strengthen the overall capacity of trade support service providers operating within their borders. Ultimately, this involves a ***higher priority on trade facilitation*** and the ***development of national strategies*** to enhance trade support services.

Need for Country Specific Analysis

Since the particular significance of certain weaknesses in the trade support service industry, in addition to their resulting economic costs vary from country to country it is ***important to evaluate the particular conditions and market environmen*****t** in which service providers operate prior to developing national initiatives. This should include a ***constraints analysis*** covering various modes of transport, intermodal networks, infrastructure, customs practices and procedures, trade related banking and financial practices, transport intermediaries and the overall development of a country's transport and logistics system.

Roadmap for Trade Support Services Analysis in Developing Countries

Due to the complexity and fragmented nature of international transport and logistics networks, new market demands and security concerns, the ***analysis of trade support services sectors can be difficult.*** Nevertheless, through investigating the right issues and asking the right questions, it is possible to obtain the data necessary for a ***comprehensive analysis*** and information necessary ***to develop a clear picture*** of the issues affecting timely and cost effective movement of trade. This paper provides a ***roadmap for country specific analysis*** by developing a framework that ***identifies sources of bottlenecks and higher transaction costs*** in developing countries. Specifically, this involves the application of ***"issue identifiers, "*** quantitative or qualitative questions that target particular issues discussed in the paper and ***determine factors that impact both time and costs*** throughout trade transactions. These "identifiers" address focus on particular modes of transport, the intermodal integration of different modes of transport and non-modal issues that impact the movement of goods. The results of this analysis could facilitate ***development of comprehensive competitiveness initiatives*** tailored to facilitate the development of more cost effective and efficient services to enhance trade competitiveness.

Introduction

The international economy provides vast opportunities to drive economic growth through international trade. Weaknesses in many developing countries' trade support services sectors, however, contribute to high transaction costs and a limited ability to meet the transport and logistical demands of an increasing complex global economy, undermining the competitiveness of their goods and thus the ability take advantage of foreign market opportunities.

Objective

This paper addresses the provision of trade support services from the perspective of developing countries interested in becoming integrated into the global economy. It aims to demonstrate the importance of trade support services within the context of increasingly complex transport and logistics demands of the international economy and how various constraints and weaknesses in the provision of these services can increase transaction costs affecting competitiveness. While reviewing current efforts taking place at the global level to enhance the provision of trade support services, this paper also aims to provide a framework or "roadmap" for country-specific analyses to be utilized by countries and international donors alike to facilitate the development of national and regional initiatives to enhance transport and logistics systems in developing countries.

Methodology

This analysis is based on primary data obtained by CARANA from transport and logistics sources and a comprehensive review of transport, logistics and trade facilitation literature. Key primary sources used in this analysis include:

- ***Freight Forwarders*** in nine countries which completed a survey of "all-in" rates for Destination Duty Unpaid (DDU) charges to determine landed cost from origin to destination, exclusive of duty and tax charges. Each freight forwarder was asked to itemize charges for each component (inland, ocean or airfreight, documentation and handling fees, insurance, storage and warehousing, etc.).
- ***Airfreight*** rates, which were obtained from The Air Cargo Tariff (TACT) list published quarterly by the International Air Transport Association (IATA). The information provided included updated airfreight rates, without forwarders' markup, airport storage rates and details about cargo operation at major airports around the world.
- ***Ocean Freight*** rates, which were collected from Internet sites of ocean carriers. Search engines provided itemized ocean freight quotes based on queries regarding origin, destination, commodity and container size and type.
- ***Port Specific Information*** obtained from the website of port authorities in six countries.
- ***Interviews*** were conducted with individuals from a range of government agencies, business associations and private businesses to provide inside perspectives of the international trade and logistics system.

The primary data is complemented by a range of secondary literature resources covering issues related to the provision of trade support services. These sources are used to validate conclusions derived by the primary data analysis and contribute to discussion of transportation and logistics policy issues and constraints outside the scope of the original research effort. Many of these resources are reports and papers sponsored by international organizations involved in trade facilitation, including the World Bank, WTO, and UNCTAD.

The paper is structured as follows:

Chapter One briefly discusses the key demands on trade support services from an increasingly complex international supply chain. It describes how the multiple steps and a myriad of players involved in a trade transaction can lead to higher overall transactions and affect the competitiveness of exported goods. It also demonstrates how developing countries can suffer from unnecessarily high transaction costs related to the provision of trade support services, which undermine efforts to achieve competitiveness and reap the benefits of the international trade system.

Chapter Two identifies and discusses a number of key cost drivers of various trade services, as measured in cost outlays and, when possible, time (inventory) costs. It draws on an extensive literature review, plus primary data collected by CARANA to obtain up-to-date data concerning costs of maritime, air and inland transport, cargo handling, storage and trade insurance.

Chapter Three describes efforts that have been or could be applied to help countries address the issues noted throughout this paper so that they can begin improving trade services efficiency and reduce transaction costs. It discusses efforts at the global level, particularly within the auspices of the WTO, to reduce regulatory barriers. As a leader to future initiatives, this chapter presents a road map for country specific analyses of trade support services sectors, in order to facilitate the development of national strategies geared toward enhancing developing countries' trade competitiveness through more efficient transport and logistics systems.

Chapter 1: The Importance of Logistics in International Trade

Overview

The ongoing integration of the international economy has resulted in unprecedented growth in the value and volume of trade. The value of trade can be a valuable component of developing and developed countries' economies, accounting for well over 50 percent of GDP in many countries (see Table 1) and has been a key catalyst of economic growth.

Table 1. Trade in Goods as percentage of GDP (2001)

	Trade in Goods % of GDP 2001
East Asia	61.0
Europe & Central Asia	65.9
Latin America & Caribbean	37.6
Middle East & North Africa	45.4
South Asia	23.4
Sub-Saharan Africa	56.0

Source: 2003 World Development Indicators database, World Bank

A dramatic increase in trade can be traced in part to the ongoing efforts to reduce tariff and non-tariff barriers to trade though bilateral trade agreements and multilateral negotiation in the World Trade Organization (WTO). Since the Post-Uruguay Round, customs tariff rates in developed markets (USA, Canada, European Union and Japan) have fallen on average to the point that they account for only 3.7 per cent of the export transaction price. As trade negotiations continue, tariff and non-tariff barriers in most areas will likely be reduced to negligible levels, not only in developed countries, but also in lower- and middle-income countries. While the tariff levels facing a particular country in the past have had a major impact on the competitiveness of their goods in another country's market, lower market entry tariffs make other determinants of competitiveness significantly more important.

A key determinant of trade competitiveness is the extent to how timely and cost-effectively export goods can be shipped from a factory, warehouse or port in the country of origin to destination markets throughout the world. The ability to compete in today's competitive trade arena depends on direct transportation of goods as well as a complex chain of trade support services that include:

- Transport of goods via air, ocean, rail and/or road freight
- Use of infrastructure and facilities for cargo handling and transfer
- Customs and border procedures
- Banking and finance instruments related to trade insurance and letter of credit
- Documentation and forwarding through transport intermediaries

The quality, cost, and efficiency of these services – and the overall capacity to provide them — can have a direct impact on an exported good's landed cost and thus on the overall competitiveness of the good in international markets.

This chapter briefly discusses the key demands on trade support services from an increasingly complex international supply chain. It describes how the multiple steps and myriad of players involved in a trade transaction can lead to higher overall transactions and affect the competitiveness of exported goods. It also demonstrates how developing countries can suffer from high transaction costs related to the provision of trade support services, which undermine efforts to achieve competitiveness and reap the benefits of the international trade system.

Demands on the International Trade and Logistics System

Effectively providing trade support services has always been an important step in maintaining export competitiveness. Today, the increasingly complex nature of the international economy has resulted in greater demands on the provision of trade support services. As described below, this complexity stems in part from the demands of manufacturing and distribution systems that require not only the rapid and efficient export of final goods or raw materials, but also the rapid and efficient movement of a range of intermediate goods that are likely to be inputs for final goods that will themselves be exported.

Global Manufacturing and Distribution Networks

In their search for global competitiveness, suppliers of raw materials and manufacturing companies seek to locate operations in areas that offer competitive advantage for production, many times developing networks of production facilities. For example, the engine parts of a vehicle produced by a German automobile manufacturer may be exported from Germany, assembled in a plant in Mexico, then exported to the U.S. to be added to the final product (which includes other imported components) and offered for sale in the U.S. market.

Fragmented manufacturing and distribution processes, coupled with customers' desire to reduce inventory and postpone purchases, have resulted in smaller, more frequent, and more time sensitive international trade shipments. Meeting the needs of customers who demand high levels of service at the lowest possible cost requires complex transport and logistics networks that are able to respond to demand in a timely, cost-effective manner. Successful global production and manufacturing operations (and their respective supply chains) closely integrate their distribution activities to ensure reliable access to inbound materials as well as timely delivery to the end customer. Because major companies recognize the competitive advantage they can gain from logistics and supply chain management, they seek to tap into global transportation and logistics systems that are predictable and cost-effective.

Just-in-time Logistics Requirements

As the global marketplace becomes more competitive, firms aim to boost productivity of existing resources and capital while managing complex supply, production and distribution systems. At the core of this process is the matching of supply and demand in a real-time or near real-time basis to reduce inventory and free up working capital that has traditionally been allocated to inventories, warehouses, and other assets. Just-in-time (JIT) inventory management is at the heart of this revolution. Increasing inventory turns and lowering inventory carrying costs frees up significant amounts of capital that can be reinvested

or returned to shareholders. Effective logistics management can reduce the cost of production and distribution.

Developing an efficient JIT logistics system is a complex task that requires a well-managed, consistent, and visible supply chain. Reducing safety stocks – which have been called "just-in-case" inventory – requires the integration of all supply chain operations to ensure rapid response to orders. Trade support services such as packing, labeling, insurance, banking services, customs procedures, and multimodal transport management must be fully accurate, responsive, and integrated to provide the flexibility, reliability, and precision necessary to prevent the missteps that can be so costly in a just-in-time world.

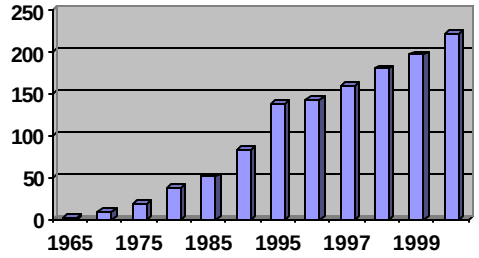
Intermodal Networks

In response to the growing need for rapid, predictable, and cost-effective transport, the movement of goods has increasingly been carried out on a "door-to-door" or intermodal basis involving one or more modes of transportation (road, rail, air, maritime). Intermodal supply networks have drastically reshaped the transport logistics sector over the last 30 years. Both buyers and sellers increasingly rely on intermodal transit operators to transport goods from origin to destination while assuming the liability and delivery time responsibilities, regardless of whether the goods travel under a single carrier or mode of transport. While the largest portion of intermodal movements involves trucks and maritime services, there is growing usage of rail and air transport. Precise coordination of equipment, facilities, procedures and intermediaries is required across all modes to produce the benefits promised by intermodal transport.

The leading providers of intermodal services are the global freight forwarders who typically do not own their own transport assets but operate under the designation of a Non-Vessel Operating Common Carrier or NVOCC. The freight forwarder's traditional role of arranging for the use of individual modal stages on behalf of shippers enables them to assume all of these roles under a single carrier designation. Large liner shipping companies have begun expanding their services to perform the full range of modal services. This expansion of services is largely a result of the need to increase high value, profit generating services to account for the low margin (sometimes unprofitable) ocean freight business.

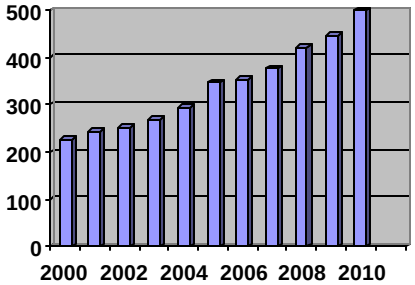
By its very nature, intermodal transport is quite fragmented, making it difficult to give precise numbers on the amount of international trade traffic traveling by multiple modes. Nevertheless, data indicates that intermodal transport is increasing significantly. As Figure One shows, world container throughput at ports has grown

Figure 1. World Container Throughput (million TEUs)



Source: ISL Bremen

Figure 2. Forecast World Port Container Throughput (millions TEU's)



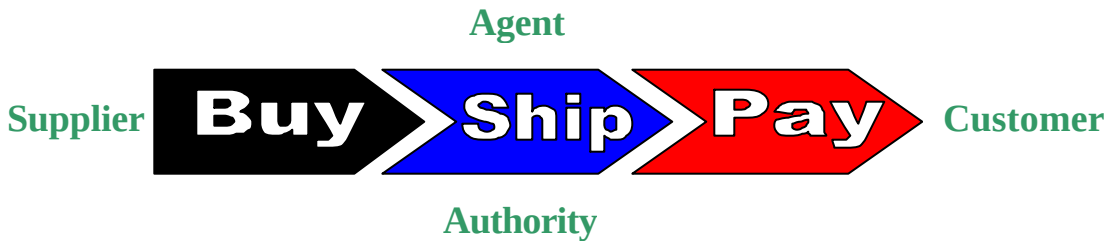
Source: ISL Bremen

from zero in 1965 to 225.3 million TEUs (twenty foot equivalency units) in 2000. Forecasts estimate that container traffic will double by 2010 to almost 500 million TEUs, averaging an annual growth rate of 9 percent, as shown by Figure Two. Although there is significant movement between all regions, the largest flows of container traffic take place between Asian, European and North America, where countries generally possess advanced supply chains and high value goods.[1]

The Trade Transaction: Multiple Steps, Myriad of Players

Firms engaged in the international economy aim to develop efficient supply chain and distribution networks that improve service while reducing the amount of working capital tied up in the delivery chain. Achieving this goal is complicated by the fact that an international trade transaction is made up of multiple steps involving a myriad of players with often-redundant functions who require the same pieces of data to accomplish their function in the process.

Figure 3. – The International Transaction



The process of international trade at its simplest involves the purchase and shipment of goods and payment at the international level. The transfer of title, payment and goods between supplier and customer involves the interaction of many diverse players (such as transport intermediaries, agents and authorities), each with their own role and interest. Each activity in the chain has its own legal and regulatory framework, infrastructure issues and administrative processes that may facilitate or complicate the ease of the foreign trade process. As many as 40 participants can be involved in a single transaction. An illustrative list of these participants includes:

- Seller
- Export Licensing Authority
- Export Intervention Board
- Export Health Authority
- Chamber of Commerce
- Consulate
- Pre-shipment Inspection Company
- Warehouse
- Insurer
- Credit Insurer Bank (Buyer's and Seller's)
- Central Bank (Exp. and Imp.)
- Customs Authorities
- Freight Forwarder
- Inland Transport/Drayage
- Duty Free Warehouse
- Terminal Handling Operators/Receiving &
- Carrier Import Customs Agent
- Carrier Agent
- Customs Broker
- Import Licensing Authority
- Import Intervention Board
- Standards Institute
- Buyer's Warehouse
- Buyer's Insurer
- Buyer

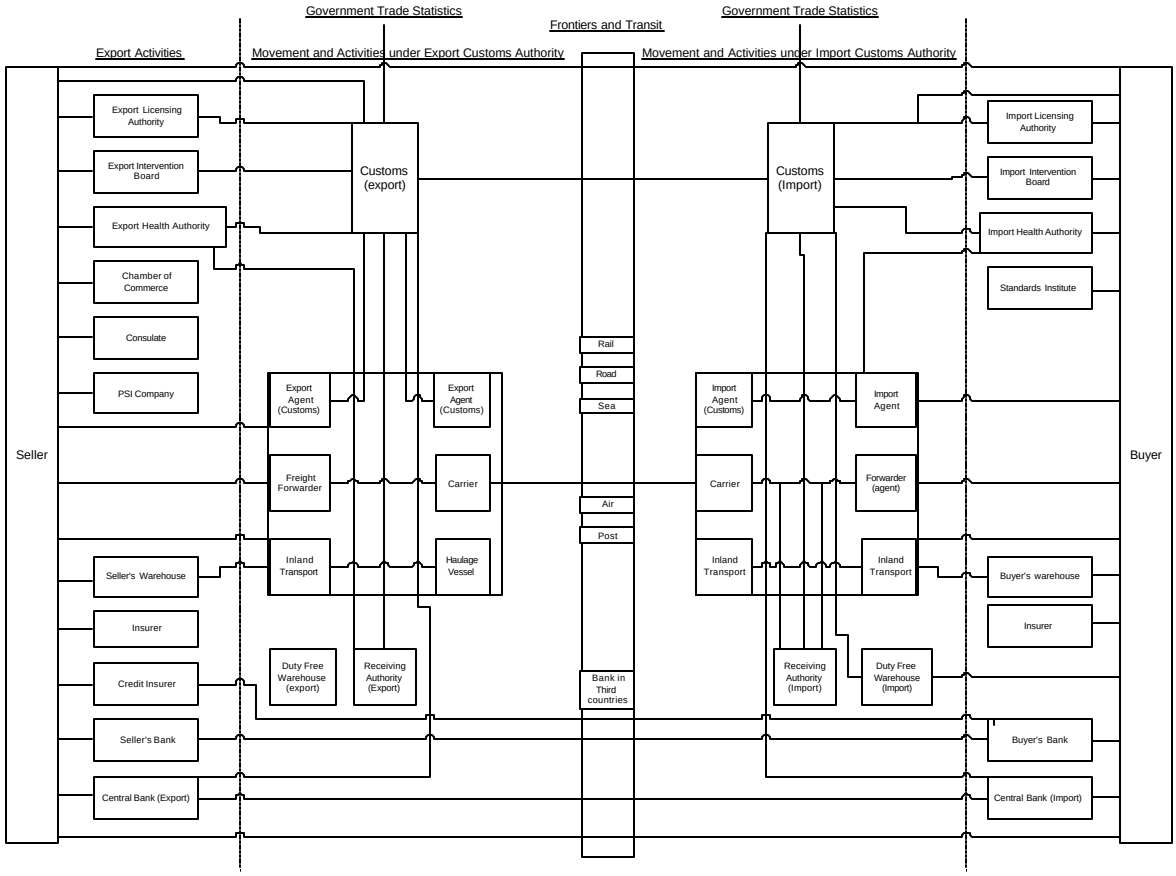
[1] UNCTAD, "Multimodal Transport: The feasibility of an International Legal Instrument," by UNCTAD Secretariat (January 2003).

Authority

The wide variety of trade support service participants and the often overlapping and collaborative relationships they share in the complex trading process are illustrated in Figure Four.

With so many steps and parties involved, the timely and efficient completion of a trade transaction can be affected by inefficiencies, human or system error, technical failure, corporate and government favoritism, or corruption. That is why many companies seek a single coordinator responsible for the process from origin to destination to shepherd the process and eliminate bottlenecks and elements that might affect the overall cost of the exported good.

Figure 4. – UN/CEFACT Supply Chain Model: International Shipment Process



Source: UN/CEFACT BPA Working Group, Geneva November 1999.

Security Considerations

The process of international trade is greatly complicated by security considerations that have put in place in the post-September 11th world. In order to reduce the possibility of terrorists using the international transport system to smuggle weapons of mass destruction into their borders, many governments —

particularly the U.S. — have imposed heightened security regulations that will challenge global trade and distribution networks. Important developments include:

- ***24-Hour Advance Manifest Rule*** **-** In December of 2002, the US Department of Homeland Security, through the Customs and Border Protection (CBP) Agency, adopted new anti-terrorist regulations placing new requirements on shippers transporting cargo through US ports to minimize the risk that terrorists hide weapons of mass destruction in any of the nearly 11 million sea containers passing through US ports each year. The new "24-hour advance manifest rule" is at the heart of this new effort to screen all cargo before it is loaded at the initial port of departure. As of May 4, 2003 carriers and non-vessel operating common carriers (NVOCCs) are required to provide complete details of the shipment, including name of shipper and consignee, complete commercial descriptions of the merchandise, accurate weight and piece counts, and container seal numbers posted on the loaded container. These cargo declarations must be transmitted to the CBP offices at the port of unloading 24 hours before cargo is loaded aboard the vessel at a foreign port of origin. Failure to comply with this rule results in "do not load" status for the cargo and the cargo must be "rolled" to a later vessel. Carriers that do not adhere to the manifest rule and load cargo under "do not load" status face penalties ranging from $US 5,000 for the first infraction to $US 10,000 for any subsequent failure. The new rules have potentially significant effects for ports with limited storage space or shippers that transport perishable commodities. The export of goods from developing countries with less automated and congested ports will likely be affected.

- ***C-TPAT Program*** **-** In an effort to strengthen overall supply chain and border security, US Customs has also initiated a joint business-government program to enhance cooperation between border officials and international shippers. The "Customs Trade Partnership Against Terrorism" (C-TPAT) program recognizes that efficient and effective border cooperation relies on the ultimate owners of the supply chain, importers, carriers, brokers, warehouse operators and suppliers. The C-TPAT initiative asks businesses to ensure the integrity of their security practices and communicate these guidelines to trading partners around the globe. Certification under the C-TPAT program will result in expedited cargo movements and a reduced number of inspections in the targeting process. While foreign shippers may not need to be certified under C-TPAT, their cooperation and understanding of foreign port requirements are essential to its effective intents.

Higher Transaction Costs in Developing Countries

The quality and development of trade support services vary from country to country. Depending on the costs that are accrued through the various steps of the international trade transaction, these differences can have a large impact on the comparative competitiveness of countries aiming to export goods into the international market.

In general, firms exporting goods from developing countries face higher transaction costs than those from developed countries. For example, Table Two demonstrates wide differences in freight costs as a proportion of total of traded goods (imports) between developing and developed countries and different regions of the world. On average, freight costs for developing countries are nearly twice as high as those for developed countries. To put this into perspective, a study of trade and transport facilitation in Central

Asia[2] points out that, transport and trade support service costs (as a percentage of export transactions) generally are nearly three times the cost of customs tariffs facing developing countries in developed country markets. The

[2] Molnar, Eva and Ojala, Lauri, "Transport and Trade Facilitation Issues in the CIS 7, Kazakhstan and Turkmenistan," World Bank (2003).

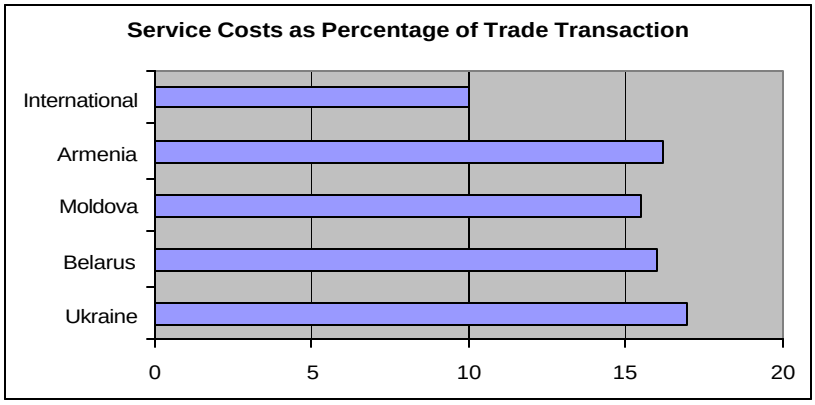
Table 2. Estimates of total freight costs for imports in world trade by country groups				
Year	**Country Group**	**Estimate of total freight costs of import ($US Millions)**	**Value of imports (c.i.f.) ($US Millions)**	**Freight costs as % of import value**
1990	World total	173,102	3,314,298	5.22
	Developed market-economy countries	117,004	2,661,650	4.4
	Developing countries-total	56,098	652,648	8.6
	Africa	9,048	81,890	11.05
	America	9,626	117,769	8.17
	Asia	35,054	427,926	8.19
	Europe	1,909	21,303	8.96
	Oceania	461	3,760	12.26
2000	World total	384,013	6,187,292	6.21
	Developed market-economy countries	233,784	4,486,628	5.21
	Developing countries-total	150,229	1,700,664	8.83
	Africa	14,447	111,360	12.97
	America	34,624	403,428	8.58
	Asia	98,364	1,156,291	8.51
	Europe	2,182	24,454	8.92
	Oceania	612	5,130	11.94

Source: UNCTAD Secretariat estimates based on data supplied by the IMF from UNCTAD Review of Maritime Transport, 2002

average cost of transport for developing countries' exports is around nine per cent of the total cost of the traded good, compared to just over five percent in developing countries. The proportion of transport to overall transaction costs increases to around fourteen per cent in landlocked developing countries. Figure 5 demonstrates how landlocked countries in Central Asia face proportionately different trade services costs in relation to the international norm.

Figure 5: High Relative Transaction costs in Central Asia

Average Trade Support Service Costs in Central Asia **-** Transport service costs, as a percentage of the cost of an international trade transaction for Central European shippers, remain well above the international average of 10 per cent. Due to poor infrastructure, under-developed customs and border facilities and procedures, high administrative costs and transport costs these developing countries face large barriers to international competitiveness.

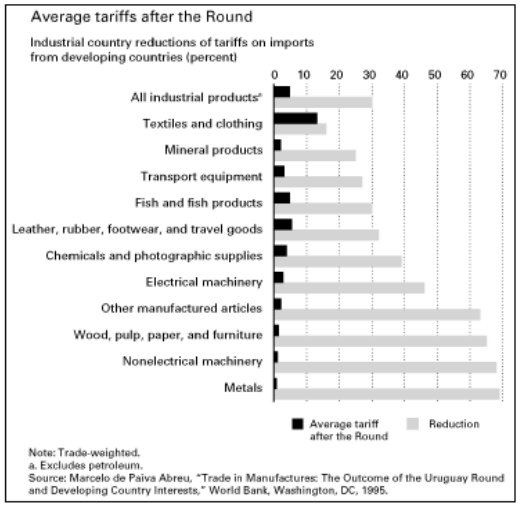


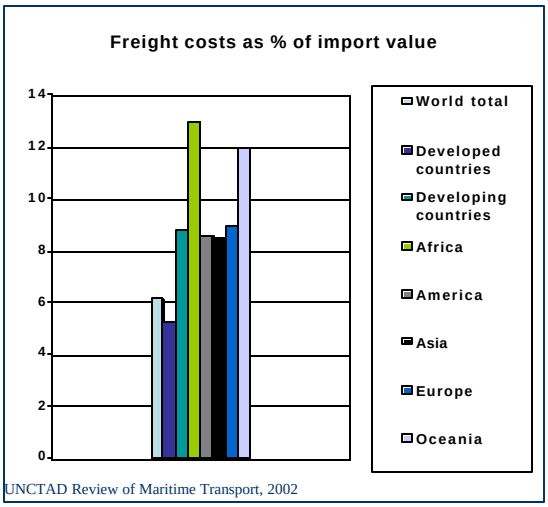
Source: Molnar and Ojala

For many countries,

transaction costs related to trade support services can account for as much or more as three times the rate of tariff duties and three times the cost of transport in developed countries.[3] Countries with comparatively large transaction rates, as a proportion of final cost of the good, face a trade barrier that has the same overall impact as high tariffs. As Figure 6 demonstrates, countries from some regions have a competitive disadvantage relative to others even with lower tariffs in almost all goods categories. For example, freight costs, as a proportion of total cost of a trade goods, on average are over 40 percent higher in Africa than the developing country norm, and nearly two and a half times higher than the developing country norm.

Figure 6: Lower Tariffs, Higher Transaction Costs Facing Developing Countries





The poorest regions of the world often have the greatest reliance on trade in goods as a percentage of GDP. Unfortunately, the same regions have some of the most costly trade support services. In a world where marginal cost differences can have a significant impact, these higher cost trade support services can greatly limit goods competitiveness in international markets. Countries that are unable to reduce their transaction costs will find it harder to be competitive in international markets and reap the benefits of expanded exports, foreign investment and economic growth.

[3] (Molnar, Ojala 2003)

Chapter 2: Drivers of Higher Transaction Costs in Developing Countries

Overview

In order to take advantage of the opportunities provided by the international trade system, developing countries must meet the demands of complex production and distribution networks that value speed, reliability and efficiency. As noted in the previous chapter, there are various steps in the trade transaction that can add to the final cost of a good at its destination. Generally, trade support services costs can be broken into a number of categories:

- Costs of transport via air, ocean, rail and/or road freight
- Use of infrastructure and facilities for cargo handling and transfer
- Customs and border procedures
- Transport intermediaries
- Banking and finance costs related to trade insurance and letter of credit

The actual costs of trade support services can vary according to the location of a country, the mode of transport used, quality of trade support services infrastructure, the level of competition within the trade support services market, and regulatory framework within which the services operate. These costs contribute to the overall cost of a good from any country, whether developing or developed. This chapter identifies drivers that can increase the transaction costs of goods traded to, and particularly from, developing countries. It draws on an extensive literature review, plus primary data collected by CARANA as described below:

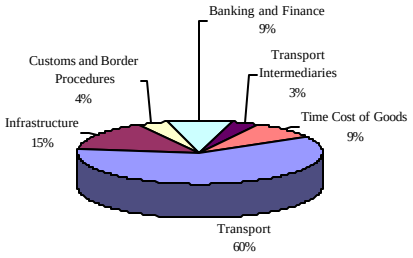
- ***Freight Forwarders*** in nine countries quoted shipping costs for Destination Duty Unpaid (DDU) charges to determine landed cost from origin to destination, exclusive of duty and tax charges. Each freight forwarder was asked to itemize charges for each component (inland, ocean or airfreight, documentation and handling fees, insurance, storage and warehousing, etc.).
- ***Airfreight*** rates were obtained from The Air Cargo Tariff (TACT) list published quarterly by the International Air Transport Association (IATA). The information provided included updated airfreight rates without forwarders' markup, airport storage rates and details about cargo operations at airports around the world.
- ***Ocean Freight*** rates were also collected from Internet sites of ocean carriers. Freight rating engines provided itemized ocean freight quotes based on queries regarding origin, destination, commodity and container size and type
- ***Port Specific Information*** was obtained from the website of port authorities in six countries.
- ***Interviews*** were conducted with individuals from a range of government agencies, business associations and private businesses to provide inside perspectives.

The use of this primary data allowed CARANA to obtain up-to-date data concerning costs of maritime, air and inland transport, cargo handling and storage and trade insurance. The conclusions drawn from the primary data analysis are validated by a range of secondary resources covering issues related to the provision of trade support services.

Our study identified a number of key drivers leading to higher transaction costs through added costs of money and time (inventory) in the movement of traded goods in developing countries. Many of these drivers are tied to different modes of transport (maritime, air, or land), the costs of auxiliary services and the consequences of inadequate market competition within modal sectors. Additional cost factors include customs, banking, transport intermediaries, and costs connected to an overall poor capacity to provide efficient trade support services, these are discussed on the basis of secondary sources.

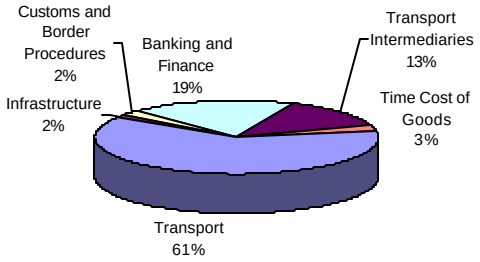
Figure 7: Examples of Varying Composition of Transaction Costs

Export Transaction Costs - Nepal to United Kingdom



Source: World Bank

Air Export Shipment Costs - Guatemala to Singapore



Source: Data From Shipping Agent Quotes, CARANA, June 2003

Drivers of Higher Costs by Transport Mode

As shown by Figure Seven, the costs of transport account for a large portion of the overall transaction costs and thus an important component of developing countries' export competitiveness. Many of the factors affecting the overall cost of transport are tied to the different modes (maritime, air, road, rail) used to transport goods and the various costs, activities and characteristics related to those modes.

Cross-Modal Drivers of Higher Transport Cost

There are a number of general drivers relevant to developing countries that lead to higher relative transport costs, regardless of the mode of transport. These drivers are often tied to the economic and geographic realities of many developing countries.

Distance from Trading Partners:

The distance of developing countries from the major markets of Europe, North America and Japan have long been a driver of the relatively higher transport costs. Developing countries tend to be outside of the high volume, regularly scheduled, and time definite port calls of the major international carriers. Distance between markets generally increases the cost of transportation. A study by Limao and Venables[4], using shipping quotes from the US to a variety of destinations around the world, found that an extra 1,000 km in distance raises transport costs on average of 8% of a shipment, and up to as much as 50% of the transport costs for a shipment from landlocked countries. Quotes obtained by CARANA from a leading logistics company confirms this finding (see Table Three).

Table 3: Cost of Transport by Distance

Origin	Destination	Ocean Freight Cost
Newark, NJ USA	Astana, Kazakhstan	$6,100.00
Newark, NJ USA	Guatemala City, Guatemala	$3,885.00
Newark, NJ USA	Dar es Salaam, United Republic of Tanzania	$5,075.00

Source: Quotes from shipping agents, CARANA, June 2003

The shortest all-water distance — to Guatemala — is the least expensive, while transportation costs to Tanzania and Kazakhstan are substantially higher. Kazakhstan, a destination serviced largely by land transport requiring transit authority through neighboring countries, is the most expensive.

While any analysis of transport costs must recognize the high variability of costs based on service levels, transit times, and mode of transport, it is reasonable to conclude that the longer transit times associated with longer distances lead to higher costs. Moreover, with distance comes increased transit times which is an important cost factor when taking into account the higher inventory carrying costs it represents.

Low Commodity Value/Transport Cost Ratio:

Many developing countries traditionally concentrate on exporting raw materials and low value commodity shipments that are shipped in bulk. In general, these goods are shipped using less than modern logistics practices, which increases the cost of handling the goods. As a result, these countries pay a higher percentage of the export transaction cost for trade support services and freight than countries that ship higher valued goods. Transport costs for lower value goods can often be greater than the actual cost of producing such goods.

Evaluating transport cost as a percentage of the overall export transaction cost illustrates the competitive disadvantages faced by developing countries exporting low value goods. Two examples in Figure Eight show the relative importance of shipment value to the overall transaction costs. The first example is a high value consignment of carpets worth $90,000 while the second example is a bulk shipment of tea worth $20,000. While the shipments are destined for two different ports the actual cost of the ocean freight only differs by $50. The ocean freight to Germany is $1200 while the freight cost to the UK is $1250.

The percentage of transaction cost for the high value good, inclusive of inland transport, ocean freight and time cost of goods, is 42 percent, compared to 69 percent for the medium value consignment. This example illustrates that countries exporting low value high volume goods have significant incentives to trim down transport related inefficiencies.

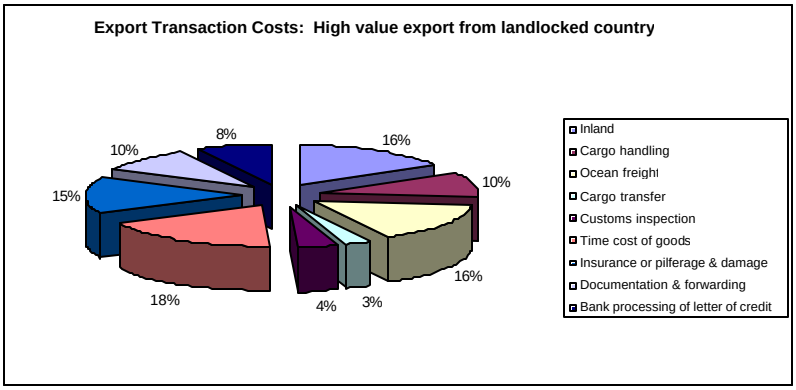
[4] Limao, N., and Venables, A.J. (2000). "Infrastructure, Geographic Disadvantage and Transport Costs." mimeo

Low Export Volumes

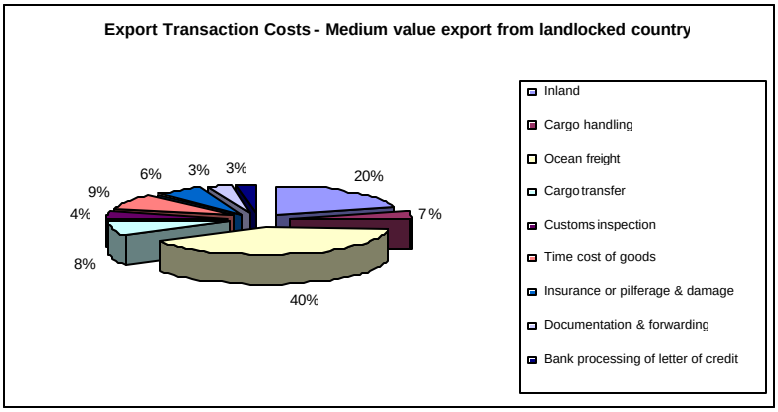
Many developing countries trying to diversify their economies start out shipping low volumes of these new goods. Lower volumes mean smaller and less frequent shipments, which lead to higher freight costs. Low shipping volumes can lead to access to fewer (if any) regular liner services, fewer flights per day and little incentive for infrastructure improvements. Due to the inconsistency of shipping quantities and schedules, developing country shippers rarely enter into long-term contracts that provide lower transport costs with freight carriers that prefer guaranteed shipping volumes, leading to greater economies of scale. Ultimately, the laws of supply and demand drive most freight rates.

Figure 8. Importance of Shipment Value

Export Transaction Costs – High Value Carpets: Nepal - Germany



Export Transaction Costs – Medium Value Tea: Nepal - UK



Source: World Bank 2001

Drivers of Higher Maritime Costs

Carrying over 90 percent of the world's cargo and at the core of intermodal container shipments, maritime transport is probably the most important mode of transport within the international trade system. As a result, costs related to this mode of transport can have a significant impact on the final cost of developing countries' goods. From port of origin to port of destination, a number of factors can affect the cost of ocean freight, including:

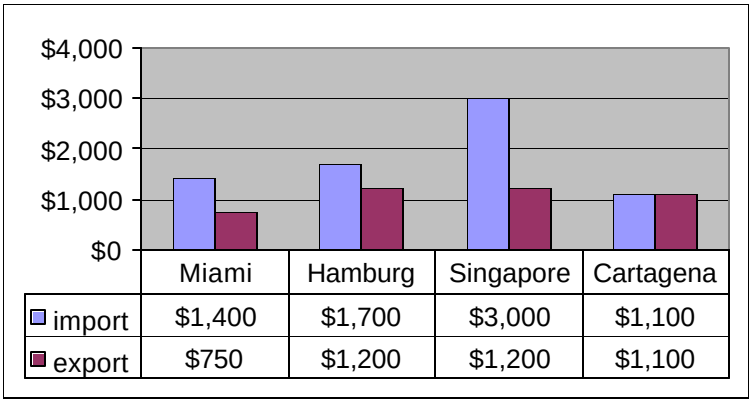
- Directional imbalances;
- Limitations on cabotage;
- International shipping patterns that require transshipment and the use of feeder services;
- Costs of auxiliary services; and
- Public and private anti-competitive practices.

Directional Imbalances

The effect of directional imbalances, which result in empty backhauls, is a contributing factor to transport costs, presenting challenges and opportunities for developing countries. Directional imbalance is a discrepancy between inbound and outbound traffic resulting in divergent freight rates. A study of US - Caribbean trade by Furchsluger (2000)[5] indicates that 72% of containers sent from the Caribbean to the US were empty. The lack of demand for containerized shipments northbound resulted in US exporters paying 83 percent more than a US importer for the same type of merchandise.

Figure 9 shows inbound and outbound rates for Port of Spain in Trinidad and Tobago. As an example of the differential expressed as actual freight rates, the freight rates for a 20-foot dry container between Miami and Port of Spain, Trinidad and Tobago were $1400 and $750 for the southbound and the northbound route, respectively. Trinidad exporters' freight costs were being subsidized by the high rates charged to imported freight.

Figure 9: Inbound and Outbound Ocean Freight Rates



	Miami	Hamburg	Singapore	Cartagena
import	$1,400	$1,700	$3,000	$1,100
export	$750	$1,200	$1,200	$1,100

Source: Furchsluger (2002)

Directional imbalance is not a phenomenon unique to developing countries. The same rate imbalance is observed in Asia–U.S. and Asia- Europe routes due to the higher number of Asian exports. Asian exporters pay nearly 50 percent more for their transport costs compared to U.S. and European suppliers.[6] Yet, this provides an opportunity for developing countries that seek to begin exporting higher value goods, since the transport of these goods would effectively be subsidized.

Limitations on Cabotage

The spread in intermodal, just-in-time cargo movements and directional imbalances has increased the importance of equipment availability in maritime ports. In many cases, maritime transport operators must reposition equipment (such as empty containers) between ports, often within the same country. Due to limitations on cabotage - the right to carry cargo between ports of the same foreign country – carriers may face excessive costs to reposition equipment. There have been several requests to amend the maritime commitments of the Generalized Agreement on Trade in Services (GATS) to provide for the movement of equipment. Movement in this area would significantly promote cost efficient transport.

Reliance on Transshipment and Feeder Services

Maritime shipping is a heavily capital-intensive operation where economies of scale can provide significant savings. The rise of intermodal usage has placed a premium on increasing network size through vertically integrated complementary services that allow for consolidation services, additional destination servicing,

[5] Furchsluger (2000). "Port and Shipping Services in the Carribbean – the vital link for integration," mimeo.
[6] Clark, Ximena, Dollar, David, and Micco, Alejandro (2001). "Maritime Transport Costs and Port Efficiency," mimeo.

development of hub and spoke systems, land bridge development and integrated sea-air services.[7] Since increasing the network size allows costs to be spread among more users, international ocean freight carriers create economies of scale through the use of larger containerships that are capable of carrying more units and the introduction of double-stack trains. Super liner usage remains prohibitive for low volume trading countries.

Feeder Services and Hub Ports - In order to justify the usage of large containerships, major carriers require increased trade volumes. The 20 largest ocean carriers, which carry more than 50 percent of the world's cargo, are currently facing two contradictory demands:

- Shorten transit times, and
- Increase ports of call to maximize utilization.

The result has been an increase in "hub and spoke" based transshipment systems. Such systems rely on smaller vessels delivering cargo to hubs able to aggregate regional cargo volumes for onward transport by larger vessels. Developing countries with low shipping volumes rarely find themselves at the center of these hub and spoke networks. The dependence on feeder services to reach transit hubs in international markets raises the cost of transport —each trans-shipment adds increased shipment distance, transit time and handling costs. For this reason, countries able to persuade major shipping lines to establish transshipment hubs within their borders can reap substantial cost benefits.

Large carriers servicing the direct call hub ports face barriers to providing feeder services. Instead national regulations force them to depend on smaller national carriers. There have been multiple calls for international maritime suppliers to operate vessels of any flag for the purposes of onward carriage of international cargo. Where there are barriers to providing feeder services, the efficient supply of maritime service transport is hindered. Currently, liberalization efforts have not succedded to the detriment of those countries most stringently opposing liberalization.

Table 4: Benefits of for Transshipment Hubs - Freight rates for 20" container imports from different ports of departure (US$/TEU)

	Miami	Hamburg	Singapore	Cartagena
Barbados	$1,900	$2,300	$3,600	$1,700
Guyana	$1,455	$1,900	$3,400	$1,815
Jamaica	$900	$1,500	$1,200	$2,300
Suriname	$2,000	$2,100	$3,300	-
Trinidad and Tobago	$1,400	$1,700	$3,000	$1,100

Source: Data obtained by local shipping agents. From Furchsluger (2000)

Hub ports provide other important benefits. A higher number of large cost-efficient carriers service the major transshipment hubs. The result is increased competition among the carriers, which results in lower ocean freight costs. Additionally, transshipment hub ports provide infrastructure capabilities to meet the large volume requirements of goods traveling through them. The result is more efficient port handling services and greater investment in infrastructure. This is important because port-handling services remain a significant cost

[7] De Castro, Carlos T., (1996)

component of ocean freight rates. These costs can sometimes equal the cost of the seaborne leg of the trip.

Table Four indicates the value of being a transshipment hub. Kingston, Jamaica is a major transshipment hub that serves larger containerships while Port of Spain, Trinidad and Tobago is a regional shipping hub. Both ports have made significant investments in infrastructure and port handling services. In the case of Jamaica, the costs of transport to major international destinations are well below that of its neighbors requiring the use of transshipment services. Trinidad and Tobago, on the other hand has competitive regional service allowing for lower cost transshipment service to its neighbors.

Anti-Competitive Practices in the Maritime Industry

Within the maritime industry[8], a number of anti-competitive practices, some which are condoned by some governments, distort competitive pricing, artificially raising the cost of shipping services. Anti-competitive practices include cargo reservation schemes, including the so-called 40-40-20 rule, the monopolistic rights granted to port service providers and collusive private agreements of maritime shipping conferences that engage in price fixing and capacity sharing agreements. To date, the WTO negotiations for maritime transport under the GATS have been weak in addressing these anti-competitive practices.

- ***Cargo Reservation Schemes*** – A major form of public anti-competitive practice are the cargo reservation schemes developed to protect capital-intensive infant industries and promote national self-sufficiency in times of war. At the core of cargo reservation schemes stipulate which countries are granted rights to carry cargo between specified countries. These schemes can take unilateral, bilateral, and multilateral forms, but in all cases they essentially represent a system by which non-participating countries are kept out of providing transportation services. In the case of unilateral regimes, only vessels flying the national flag may carry cargo to and from the country.

  The most prevalent form of cargo reservation is the UNCTAD Liner Code of Conduct, which outlines the so-called "40-40-20 rule". This rule was ratified by more than 70 countries and enacted to counter anti-competitive practices of maritime liner conferences which were dominated by industrialized country shipping lines with enormous market power. According to the signatories, transported cargo between two countries was allocated three ways with 40 percent for ships belonging to the exporting country, 40 percent for ships belonging to the importing country, and 20 percent for ships belonging to third countries. The rationale was to protect the development of developing countries' transport industries. Yet many signatories of the Liner Code did not possess the shipping means to carry the cargo on their own national carriers and instead sold their preferential shipping rights to the highest bidders. Ironically, this behavior resulted in higher transport costs rather than the initially intended transport industry development. From an initial 70 signatories, more and more countries are phasing

[8] It is important to note that there are two main branches of international maritime transport providers, based on the types of commodities that are shipped:

- Liner shipping (which has largely been the focus of this paper) refers to "the transport of commodities by regular lines that publish in advance their calls in different harbors"[8] and typically carry a majority of containerized cargo.
- Tramp shipping refers to irregular service based on current demand specializing in bulk cargoes. The WTO has indicated its belief that tramp shipping is largely competitive and free from the restrictive trade practices of liner shipping.[8] A closer examination of liner shipping practices provides an opportunity to address developing countries' distorted transport costs.

out the use of the Liner Code policies and adopting open registries allowing ships of most third countries to service their ports. Nevertheless, Liner Code policies are still on the books.

- ***Conference Agreements*** - Many observers believe that public cargo reservation schemes are less market distorting than the pervasive private price and capacity fixing cartels of the ocean conferences. Liner operators enter into various types of agreements which enable them to share pricing levels, traffic and vessel capacity. Conference agreements among carriers may provide for the fixing of and adherence to uniform freight tariffs, conditions of service and capacity sharing. Shipping conferences are normally open to any shipping company seeking to join, however with entrance comes binding agreement to adhere to the pricing, service and capacity agreements of the conference. Not all carrier agreements have rate binding clauses. Examples of conference liner freight rates collected by CARANA are listed in Table Five.

  Shipping conferences would not exist without the support of the large trading countries such as the United States and the European Union, which extend anti-trust exemption to these conferences on the basis that they provide pricing stability and utilization spreading. There has been a slow erosion of the conferences over time as low cost service providers have been able to match the transit time and service level capabilities of the large conference carriers. Additionally, in 1998 the United States amended the Shipping Act of 1984 by continuing to extend anti-trust immunity to the conferences but providing provisions for carriers and shippers to enter into private confidential contracts. While these contracts began to introduce an aspect of competitiveness in the pricing environment, both public and private anti-competitive practices result in higher transport prices for international shippers.

Table 5: Sample Conference Liner Freight Rates

Origin	Destination	Commodity	Rate ($US/40' DC)
Santa Cruz, Bolivia	New York, NY	FAK freight all kinds	$4775
Guatemala City, Guatemala	New York, NY	FAK freight all kinds	$4019
Dar es Salaam, Tanzania	New York, NY	FAK freight all kinds	$4705
Hanoi, Vietnam	New York, NY	FAK freight all kinds	$7941
Manila, Philippines	New York, NY	FAK freight all kinds	$7603
Alexandria Egypt	New York, NY	FAK freight all kinds	$2537
Dakar, Senegal	New York, NY	FAK freight all kinds	$5794
Manila, Philippines	Singapore	FAK freight all kinds	$1023
Dakar, Senegal	Singapore	FAK freight all kinds	$3016
Colombo, Sri Lanka	New York, NY	FAK freight all kinds	$7019
Colombo, Sri Lanka	Rotterdam	FAK freight all kinds	$2144
Aqaba, Jordan	Rotterdam	FAK freight all kinds	$1459
Ho Chi Minh City, Vietnam	Rotterdam	FAK freight all kinds	$3723
Manila, Philippines	Rotterdam	FAK freight all kinds	$3873
New York, NY	Santa Cruz, Bolivia	FAK freight all kinds	$7230
New York, NY	Guatemala City, Guatemala	FAK freight all kinds	$3784

Source: Shipping lines and shipping agent quotes, CARANA, July 2003

Maritime Auxiliary Services

The overall cost of maritime transport also includes a number of maritime auxiliary services that are crucial in the movement of cargo, including the loading and unloading of cargo from various modes of transport as well as the transfer of cargo between modes. The efficiency and effectiveness of auxiliary services is largely dependent on the quality of the port infrastructure and the competitive environment in which these services operate. According to GATS definitions, maritime auxiliary services fall into two distinct sets of services:

- ***Maritime auxiliary services*** - Refers to the activities related to the movement or handling of cargo in ports or on ships, such as cargo handling, storage, warehousing, container station management and depot handling.
- ***Port service*** - Refers to those activities uniquely identified with the management of the vessel such as pilotage, towing provisions, fueling, port captain's service, navigation aid and emergency repair.

Maritime auxiliary services take place within different frameworks of port organization. Three different port organization types represent the coordination of public and private maritime service providers:

- ***Landlord ports*** - Publicly owned ports where the public authorities own and maintain the infrastructure but private firms own the superstructure and operating assets and provide the port and auxiliary maritime services[9];
- ***Tool ports*** - Government owned infrastructure where infrastructure and superstructure as well as service rights are rented to private port authorities;
- ***Service Ports*** – These ports are owned by a public port authority, which operates infrastructure and services.

Most countries do not have competitive markets for maritime auxiliary services. Shippers must use the services and pay the fees for these services whether they are public or privately supplied. In some cases the handling charges are more than the ocean freight portion of the overall transport charge. In Table Six, data collected by CARANA illustrates the percentage of the

Table 6: Administrative, handling and surcharges

Origin	Destination	Base freight	Admin, handling & surcharges (AH&S)	% AH&S of total transport charge
Santa Cruz, Bolivia	New York	4200*	575	12.0
Guatemala City	New York	3394**	625	15.6
Dar es Salaam, Tanzania	New York	3600	1105	23.5
Hanoi, Vietnam	New York	6550	1391	17.5
Manila, Philippines	New York	6050	1553	20.4
Alexandria, Egypt	New York	2000	537	21.2
Dakar, Senegal	New York	4700	1094	18.9
Colombo, Sri Lanka	New York	5550	1559	21.9
Manila, Philippines	Singapore	675	348	34.0
Dakar, Senegal	Singapore	2600	416	13.8
Colombo, Sri Lanka	Rotterdam	1700	444	20.7
Aqaba, Jordan	Rotterdam	1200	259	17.8
Ho Chi Minh City, Vietnam	Rotterdam	3400	323	8.7
Manila, Philippines	Rotterdam	3400	473	12.2

Note: Admin, handling and surcharges includes Bunker Adjustment Factor (BAF) covering fuels

* Includes $1800 for inland fee to port in Arica, Chile. ** Includes $484 for inland

[9] Studies have argued that the most cost efficient and competitive port framework is the landlord ports where the majority of the operating interests reside with private port operators.[9] Trujillo, L. and Nombela, G. (1999), "Privatization and Regulation in the Seaport Industry," Journal of Transport Economics and Policy, Vol. 11, No. 2, pp. 141-54.

freight charge that is consumed by handling and administrative charges.

Administrative, handling and surcharge fees in these examples account for between 8.7 percent and 34.0 percent of the total maritime transport costs from port to port. Variations in these percentages are driven by significant differences in the administrative fees charged at the port of origin or port of destination that do not fluctuate based on base freight amounts. For example, transporting goods the short distance from Manila to Singapore has a base ocean freight amount of $675, yet additional costs of $348 in administrative, handling and surcharges amount to 34 percent of the total transport price. On the other hand, shipments from Manila to Rotterdam are subject to $473 in administrative charges, representing only 12 per cent of the total cost of transport.

Drivers of Higher Air Transport Costs

Air transport is becoming an increasingly important component of today's trade and distribution systems. Although air cargo only represents 2 percent of worldwide cargo movement (as measured by weight), OECD data indicates that airfreight now accounts for more than one third of the value of goods moved in global trade. Air transport usage is at the core of the new time-definite logistics system and continues to grow at significant rates.

Countries are investing in technology to support the increased demand, but they have not significantly changed the way they manage their air cargo agreements. For example, the highly competitive nature of the airline industry pushes carriers to seek scale in their operations beyond national borders. However, while bilateral agreements and Open Skies agreements allow more carriers to compete in foreign markets, significant restrictions continue to exist, including ownership and control, cabotage rights and the right of establishment. A number of key drivers affect the cost of transport for developing country goods via air transport. These include:

- Lift capacity and directional imbalance
- Changing schedules and cancellation
- Seasonal demand
- Costs of cargo handling, facilities and operations
- Bilateral agreements and landing rights
- Intermediary mark-up

The airfreight industry is broken down into several types of service suppliers: airfreight suppliers that use chartered freighters or cargo planes, passenger airlines that reserve a portion of their lift capacity for carrying cargo in addition to passengers and baggage, and express carriers, or small parcel carriers that specialize in shipping goods under 150 lbs. Developing countries shipping volumes often do not do justify utilization of cargo freighters and tend to rely on the freight capacity of passenger airlines.[10] A great percentage of the total lift capacity in developing countries is handled by passenger airlines, either through

[10] The North American, Asian and European routes dominate two-thirds of the freight tons per kilometer carried. While these routes see some of the highest volume changes due to seasonality, they also have the most consistent volumes and allocated freight capacities and are thus able to utilize freight specific cargo planes.

their national carriers or through the carriers of countries that have signed bilateral air service agreements (see discussion below). Reliance on passenger airlines to carry the majority of cargo has several impacts.

Lift Capacity/Directional Imbalances

For passenger carriers, cargo represents only a quarter of airline revenues per ton kilometer and just an eighth of total operating revenue. Cargo is often left behind in favor of passenger and baggage carriage when there is competition for space. Tourism, which drives the majority of passenger travel, normally involves round trip carriage for the airlines while cargo generally flows one way. As a result, airlines are subject to the same economics as maritime carriers in the case of empty backhauls, which leads to highly divergent inbound and outbound cargo rates.

Table Seven shows cargo rates according to the Air Cargo Tariff (TACT) list published quarterly by the International Air Transport Association (IATA). The TACT rates indicate clear differences for inbound and outbound rate structures. The cost for 400 kgs from New York to La Paz, Bolivia is $5.66 per kilo while the rate for La Paz to New York is only $2.99. Similarly, the rate from Singapore to Dar es Salaam, Tanzania is $11.12 while only $6.52 on the return trip. This pattern holds up between the developed and the developing countries; however, rates for inbound and outbound shipments between pairs of developing countries are more equivalent. In the case of La Paz to Dakar, the inbound rate is $9.15 while the outbound is $11.23. Trade volumes between developing countries tend to be lower, with few of the opportunities for "piggy-backing" on tourism traffic.

Table 7: Inbound and Outbound Cargo Rates

	Origin						
Destination	Dar es Salaam, Tanzania	Dakar, Senegal	Hanoi, Vietnam	La Paz, Bolivia	New York	Singapore	Amsterdam
Dar es Salaam, Tanzania	-	8.77	10.08	14.42	11.98	11.12	13.35
Dakar, Senegal	5.93	-	16.37	9.15	8.01	19.78	7.96
Hanoi, Vietnam	7.51	16.20	-	10.88	5.94	3.06	17.77
La Paz, Bolivia	15.10	11.23	12.58	-	5.66	17.44	11.26
New York	5.20	4.91	6.94	2.99	-	7.49	3.87
Singapore	6.52	16.43	2.97	9.83	4.88	-	4.52
Amsterdam	3.61	4.75	10.55	6.76	2.49	4.74	-

[illegible]

Changing Schedules and Cancellation

Another driver of higher airfreight rates is the changing schedule and cancellation practices of passenger airlines. For example, since the terrorists attacks of 2001, a severe decline in tourism and passenger traffic has forced airlines to cut back on flight schedules, which in turn has reduced cargo capacity and increased competition for already limited cargo space. For exporters of perishable goods, fluctuating schedules lead to increased spoilage (which creates a loss that is ultimately accounted for higher overall prices) and an unpredictable supply of transport. To ensure consistent service and timely shipment of their goods, many

customers will pay a premium for airfreight services with national carriers that tend to keep schedules more stable than third party country airlines whose service is based on current passenger demand.

Seasonal Demand

A significant portion of airfreight is made up of perishable produce and other seasonal items. Since seasonal items comes over very short time periods and large quantities, there is a major shock to the supply and demand system that governs the airfreight market. With a relatively constant supply of lift capacity and a large increase in demand to get seasonal products to market airfreight costs for these seasonal items tend to be very high. Seasonal demand also tends to exacerbate the effects of directional imbalances further raising costs for the exporters of these seasonal items.

Cargo Handling, Facilities and Operations

The overall cost of air transport also includes a number of auxiliary services that, like maritime port services, cover the range of activities required to move cargo to and from planes, between terminals, and through customs. Specifically, these include:

- Loading and unloading trucks
- Palletizing cargo
- Transporting cargo between terminals and customs areas, and
- Providing warehousing services.

Typically, any type of company may perform services supporting air transport including freight forwarders, warehousing providers, the air carriers or the exporter or his agent. However, as with many aspects of transport, many market restricting regulations exist that put upward pressure on the price of services.

For example, many countries have restrictions concerning the loading and unloading of aircraft on the tarmac. Generally, these services must be provided by the airline authority granted these rights by the government. In certain cases, these loading and unloading rights are granted solely to the national airline of a country. In other cases non-preferred carriers may be granted the rights to provide such services but are subject to higher fees than the preferred carrier. For example, airfreight carriers may be required to rent cargo handling equipment, paying rental fees in some cases that are higher than the cost of the equipment itself. Sample costs associated with tarmac handling and aircraft loading and unloading are listed in Table Eight. In the case where outbound cargo rates are very low, the rental costs of additional equipment may be higher than the freight charges and simply passed on to the shipper in the form of higher per kilo freight costs.

Table 8: Cairo Airport Handling Charges	
Sample Cargo Handling Costs	
Loading one 40 ton freighter	$US 6,800 to 8,000 / $172 per ton
Cargo Handling	
Warehouse handling	$4.42 per ton
Dolly rental	$250 per hour
Heavy forklift rental	$177 per hour
Labor	

Bearers, porters and security guards	$35 per hour

Source: Nathan Associates, "Reducing Transport Costs of Egypt's Exports," July 1999

Inadequate Air Cargo Storage

The cost and efficiency of handling is also closely linked with airport facilities. If there are inadequate storage or staging areas for airfreight, cargo may remain outside on dollies until the plane is ready for loading. Many developing countries' cargo facilities do not have sufficient storage space, particularly in regards to cold storage. Some freight forwarders estimate as much as 50 per cent of all perishables arriving at the destination are spoiled or in poor condition. This results in low prices for the product at destination, unduly raising the percentage of the transport as a cost of the export transaction. Poor cargo infrastructure is a major concern with today's growing reliance on airfreight for transporting perishable products.

Bilateral Agreements and Landing Rights

Countries may negotiate bilateral agreements that allow particular air carriers to operate within their markets. These bilateral agreements between countries serve to open markets between pairs of countries, but do not truly enable airlines or international shippers to take advantage of economies of scale and lower transport costs. When bilateral agreements are negotiated, the national carrier is often deemed the negotiating agent and granted monopoly rights to handle international cargo movements. Where other national airlines or third country airlines are granted the privilege to move international cargo, special permission for cargo handling may be granted with rents paid to the national airline, thus raising freight costs for the alternative carriers. In other cases, the national airline may serve as the licensing authority for safety regulations, including aircraft worthiness and pilot, crew and mechanic licensing. The influence of the national carrier may in some cases pose a conflict of interest and raise barriers to private market entrants. Although in a position to unduly raise market rates, many national airlines will offer subsidized rates that may serve to increase competition. National carriers, however, often play a role in discouraging foreign market entrants and thereby limit overall lift capacity.

Table 9: TACT Airfreight Rates ($US/kg)

Commodity, Origin	Destination: New York	Singapore	Amsterdam
General Cargo			
Dakar, Senegal	4.91	16.43	4.75
Maputo, Mozambique	1.57	2.72	1.91
Colombo, Sri Lanka	4.03	1.12	2.65
Castries, St. Lucia	2.36	6.53	4.40
La Paz, Bolivia	2.99	9.83	6.76
Hanoi, Vietnam	6.94	2.97	10.55
Textiles			
Dakar, Senegal	4.91	16.43	4.75
Maputo, Mozambique	1.57	2.72	1.91
Colombo, Sri Lanka	4.03	1.12	2.65
Castries, St. Lucia	0.69	6.53	4.40
La Paz, Bolivia	2.99	9.83	6.76
Hanoi, Vietnam	6.94	2.97	10.55
Fruits and Vegetables			
Dakar, Senegal	4.91	16.43	1.40
Maputo, Mozambique	1.57	2.72	1.91
Colombo, Sri Lanka	4.03	0.44	2.65
Castries, St. Lucia	2.36	6.53	4.40
La Paz, Bolivia	2.99	9.83	6.76
Hanoi, Vietnam	6.94	2.97	10.55
Assorted Manufactured Goods			
Dakar, Senegal	4.91	16.43	4.75
Maputo, Mozambique	1.57	2.72	1.91
Colombo, Sri Lanka	4.03	1.12	2.65
Castries, St. Lucia	2.36	6.53	4.40
La Paz, Bolivia	2.99	9.83	3.43
Hanoi, Vietnam	6.94	2.97	10.55
Foodstuffs, Spices and Beverages			
Dakar, Senegal	4.91	16.43	4.75
Maputo, Mozambique	1.57	2.72	1.91
Colombo, Sri Lanka	4.03	1.12	2.65
Castries, St. Lucia	0.72	6.53	4.40
La Paz, Bolivia	2.99	9.83	3.43
Hanoi, Vietnam	6.94	2.97	10.55

Intermediary Mark-up

The listed IATA tariffs that are published in The Air Cargo Tariff (TACT) on a quarterly basis (see Table Nine) represent general cargo rates as well as commodity specific rates. A shipper's ability to negotiate lower commodity specific rates is an integral component of lowering overall transport costs. The published TACT rates do not represent the actual rates paid by shippers; air export freight forwarders and other intermediaries typically add costs to the published rates to make money on the movement of freight in addition to their cargo handling and arrangement services. This is typical of the more unregulated airfreight industry and for the non-asset based freight service providers. TACT rates, however, serve as a good benchmark for the comparative freight rate market.

Express Air Couriers

The traditional suppliers of airfreight services —freight forwarders working in concert with airlines and charter companies — account for more than 94 percent of the global airfreight market. As shippers move towards just-in-time delivery practices, however, there has been a significant rise in integrated express air couriers such as FedEx, DHL and others. The 'integrators,' as they are called, focus on time-definite delivery and provide complete door-to-door services that include local pick-up and delivery, forwarding and clearance. While express carriers have specialized in the rapid, time-definite transit of small parcel cargo weighing less than 150 lbs (express documents and small parcel shipments), they are increasingly moving into heavy cargo markets. Forecasts estimate that the traditional suppliers' market share of cargo will fall to 70 per cent by 2013. In the United States, the integrators' domestic market share of cargo rose from 10 percent in 1984 to 84 percent by 1998. With the market for air express delivery growing at 7 to 8 per cent a year,[11] the growth of air cargo (in revenue ton miles) is expected to outpace the growth of passenger traffic over the next 20 years. The integrators are a vital link in the new logistics environment and their impact continues to grow.

The primary determinants of base rates for the air express couriers, like other modes of transport, include economies of scale, volume commitments, distance from destination, and capacity. Normally, there is very little variation in costs based on the commodity that is being shipped. Although the cost drivers of express couriers are similar to those of airfreight providers, differing regulatory environments and directional balances can greatly affect them in developing countries.

Differing Regulatory Environments -Due to its door-to-door delivery nature, the global regulatory environment in which express couriers operate heavily affects the air express industry. Regulations covering courier services, postal services, air cargo and transportation services, telecommunications services, customs clearance and compliance, surface transportation services, consulting services, foreign investment, labor, licensing and certification, standards and cross-border movement of personnel all play a role in the successful operation of the air express couriers' business.

Air transport, while carrying less of developing countries' goods, is an important and growing component of their transport and logistics infrastructure. Barriers to market entrance and pervasive regulatory and legal rights to establishment of foreign carriers keep lift capacity limited and prices high. For landlocked

[11] World Trade Organization, Council for Trade in Services, "Air Transport Service." Background Note by the Secretariat S/C/W/59 November 1998.

countries with no direct coastal access, a sound air transport regime is important to serve as a regional transport hub and a catalyst for international trade growth.

Table 10. Sample Air Express Courier Rates (US$/Kg)

Air Express Courier Rates Rates are inbound and outbound from the US including door-to-door pickup and delivery and clearance. There are two sets of rates based on the shipper's qualification based on monthly spend amounts. Rates based on 100 Lbs or 45.3597 Kgs shipments	$5,000 per month		$20,000 per month	
	US$/Kg Outbound	US$/Kg Inbound	US$/Kg Outbound	US$/Kg Inbound
Belize	$14.28	$17.34	$6.73	$13.57
Bolivia	$14.28	$17.34	$6.73	$13.57
Guatemala	$14.28	$17.34	$6.73	$13.57
St. Lucia	$8.05	$5.82	$3.79	$7.64
Vietnam	$9.39	$11.40	$3.79	$8.92
Philippines	$9.39	$11.40	$3.79	$8.92
United Republic of Tanzania	$18.02	$21.88	$8.49	$17.12
Mozambique	$18.02	$21.88	$8.49	$17.12
Egypt	$9.39	$11.40	$4.43	$8.92
Jordan	$9.39	$11.40	$4.43	$8.92
Kazakhstan	$15.84	$19.24	$7.47	$15.05
Singapore	$6.95	$8.45	$3.28	$6.60
Netherlands	$6.95	$8.45	$3.28	$6.60

Source: Airborne Express Quotes, CARANA, June 2003

Drivers of High Road Transport Cost

Road transport has always been an important component of the international trade process, dominating the movement of goods to and from airports and seaports, and representing a key mode for trade between neighboring countries and for landlocked countries. The continued rise in intermodal containerized shipments has added to the importance of inland road transport as a means to provide a seamless link between ports and inland waterways and rail and road systems.[12]

The road transport component of a trade transaction can have a large effect on the overall transport costs of a trade transaction. It is estimated that more than half of door-to-door transit time and cost is spent moving to and from the coastline for goods moving from the coastline to interior locations. One study, for example, indicates that the cost added to coffee in Cote d'Ivoire from producer to FOB port is nearly 170 percent; for cocoa it is nearly 60 percent.[13] A number of factors can affect the actual costs of road transport in a particular country. These include:

- Domestic road transport conditions

[12] This reality has placed pressure on traditional ocean vessel operators to take on more local delivery functions. As a result, the pricing pressure of the ocean conference carriers has gradually been extending into the inland portion of the transport movement.

[13] (Carlos T. de Castro 1996)

- Poor road conditions, and
- Problems faced by landlocked countries.

Domestic Road Transport Market Conditions

The most predominant factor driving road transport costs is the overall condition of the road transport market. In many developing countries, local private entrepreneurs and private fleet operators (many of which operate under contracts for other transport intermediaries or carriers) provide road transport. This can result in a wide variation in pricing by regional location and by country, with operating costs, vehicle utilization and load factors all having a role in determining local inland cost. Tables 11 and 12, which detail some sample costs, illustrate these discrepancies. Note that these costs do not account for transit time, vehicle breakdowns, or overall cargo immobilization costs.

Table 11: Sample Country Cost (per ton/km)

Country	Cost per ton/km
Cameroon	US$0.12 to 0.93
Pakistan	US$0.02 to 0.03
France	US$0.07 to 0.09
Mozambique	US$0.20 to 1.00

Source: Carlos T. De Castro

Table 12: Sample Country Cost of Local Delivery (US$ per 40' Dry Container)

Country	Cost per 40' DC
Alexandria, Egypt	US$80.00
Santa Cruz, Bolivia*	US$120.00
Dar es Salaam, Tanzania	US$160.00
Hanoi, Vietnam**	US$215.00
Oakland, USA	US$204.00

* No 40' containers allowed in Santa Cruz. Container must be unloaded in Santa Cruz Customs warehouse and transported via smaller trucks.

** Transit is from Hai Phong port to Hanoi. Due to city congestion trucks are only allowed in city limits at night.

Source: Quotes from freight forwarders and shipping agents,

A look at various rates for local delivery of a forty-foot dry container within city limits illustrates the significant cost of inland transport, which in some cases can reach to 5 to 10 percent of overall freight transport costs.

The actual cost of delivery varies between locations, from a low in Egypt of $80 to a high in Vietnam of $215. A portion of the price differentials can be explained by the distance covered . The distance from the port of Haiphong to Hanoi is much greater than the local delivery distance in Egypt. Additionally, the highly competitive road transport sector in Egypt has significantly helped keep the costs of local road transport down. The high cost of local delivery in the United States may be surprising given the competitive environment of the business, but strict environmental standards and safety requirements plus high labor rates contribute to higher transport prices.

Nominal rates charged for inland haulage in different locations may not fully reveal true costs. For example, while inland haulage rates Oakland are almost twice those of Santa Cruz, Bolivia, service in Oakland tend to be significantly more reliable and efficient Many developing countries do not allow trucks with 40 ft. containers to navigate city streets due to poor infrastructure, high congestion and narrow streets. As a result, local deliveries may require additional handling, which can lead to increased costs and opportunity for damage. In the case of Bolivia, the goods are transported from the port to a customs warehouse on the city limit, then transported to interior destinations via smaller trucks once the container has been unpacked. Each transfer of cargo adds cost (both in terms of cash outlays and additional transport time) to the delivery.

Poor Road Conditions

One issue related to domestic road transport markets that requires special attention is the overall condition of the road network. Many developing countries suffer from poor road infrastructure which can increase vehicle operating costs (VOC) per kilometer, which are turn passed onto freight customers through higher road user costs (RUCs). In addition, poor roads lengthen travel times, which add to time delays, spoilage of perishable goods, and damage of more fragile goods. The loss of revenue stemming from spoiled or damaged goods adds to the overall cost of transporting goods. Capital investment to improve the conditions of the physical infrastructure related to road transport is key to developing more economical and efficient shipping and logistics networks.

Problems Faced by Landlocked Countries:

Table 13: Sample Country Road Transport Costs (US$ per TEU Dry Container)

Origin	Destination	Cost US$/TEU
Harare, Zimbabwe	**Durban, South Africa**	**$1362**
Durban, South Africa	**Harare, Zimbabwe**	**$1297**
Harare, Zimbabwe	**Beira, Mozambique**	**$775**
Beira, Mozambique	**Harare, Zimbabwe**	**$1522**

All rates for dry cargo
Source: Quotes from freight forwarders and shipping agents, CARANA, June 2003

On average, it is estimated that landlocked countries incur 50 percent higher transport costs than those countries with coastal access. Goods transported to and from landlocked countries generally must travel longer distances, which may entail varying road conditions, border crossings and greater opportunity for breakdown. . Using data collected by CARANA Table 13 shows that inland freight rates faced by importers and exporters in Zimbabwe are significantly higher than those faced by their counterparts in Mozambique or South Africa.

The problem of distance for landlocked countries is compounded by the multiple regulatory environments through which cargo traveling by road must go. Added to the increased complexity of goods crossing national borders is the crossing of the drivers and their vehicles. Immigration services and vehicle inspection stations often do not allow for predictable and timely border crossings. For example, requirements for drivers to leave their vehicles and process visa papers slow down border crossing significantly. Adding to the delays are the manual processes for visa record keeping and issuance. Delays are often so significant that shippers are often forces to pass cargo on to local haulers, incurring additional cargo handling costs. Special visa regimes with multiple

Rail Transport

When compared to road transit, rail transit is often believed to shorten traveling time, make the date of arrival more predictable and better preserve the quality of the cargo. However, rail transit is subject to many of the same challenges as road transit. Chief among these challenges is the fact that the customer is served by as many railways as there are countries to enter. With each border crossing comes the potential for delay and cost.

Typical activities that take place at rail borders include changing locomotives, crews and track gauge. There is often a lack of inter-operability between countries as well as underdeveloped intermodal linkages. Border improvements are often opposed by national railways and their dependent labor groups that fear the effects of regional competition

entry rights have long been on the agenda of international road transport organizations such as the International Road Transport Union (IRU). Countries relying on neighbor country transit are most heavily constrained by excessive delay and costs at crossing multiple borders.

Infrastructure and Facilities for Cargo Handling and Transfer

Storage of goods can be as important as their physical transport. Port and airport storage facilities are important infrastructure elements in the movement of international goods — from the time a shipment is unloaded from a vessel or aircraft, to the time it moves through the customs clearance process, and then is ultimately delivered to the customer. These storage facilities are normally operated by the port or airport authority responsible for the cargo handling services. Terms of storage can vary from one port or airport to another; however, almost all port and airport storage facilities provide a number of free days to importers and exporters to accommodate customs clearance. Costs for additional days are added as a deterrent to using these locations as long-term storage facilities. Sample rates obtained from shipping agents by CARANA are shown in Table 14 and Table 15 as follows:

Table 14. Seaport Storage Rates

Country	Charge $ per 40'/day	Free days
Namibia	$0.75/m3	3 days free
Philippines	$9.01	5 days
UAE	$6.79	30 days
Los Angeles	$65 (5-10) $130 (10+)	5 days
Korea, P.R.	$2.31	10 days
India	$6.50 (4-15), $13.00 (16-30), $26.00 (30+)	3 days

Source: Shipping Agent quotes, CARANA, June 2003

Table 15: Airport Storage Rates

Country	Charge $ per kg/day	Free days
Vietnam	0.02 (3-6) $0.05 (6-10) $0.08 (10+)	2 days free
Guatemala	$0.25 per $100 import duties	12 days
Philippines	$0.02	None
Jordan	$.28 per 100kg	7 days
Mozambique	$0.01	2 days
Senegal	$0.01	2 days

Source: Shipping Agent quotes, CARANA, June 2003

Actual costs of warehousing and storage are not predominately higher in developing countries than developed countries; nonetheless, access to foreign country markets for these services increases competition within the market, potentially further reducing costs and increasing efficiency. While costs may not be significantly different, the same cannot be said for the quality of warehousing and storage facilities, which in many developing countries is underdeveloped. For example, many warehouse and storage facilities do not have adequate cold storage for perishable goods or sophisticated warehouse

management systems that enable high levels of productivity and visibility. Such constraints can limit the ability of a developing country to integrate into the coordinated advanced supply chains of developed countries. Given that highly developed supply chains rely on sophisticated and reliable information technology to manage, control, and track shipments, the lack facilities and services that enable such integration restrains the ability of developing countries to trade value-added goods.

Non-Modal Drivers of Higher Transaction Costs

A number of factors surrounding the actual movement of goods, not specifically involved in direct transportation activities, can still have a large impact on the overall cost and timeliness of shipments. Some involve regulatory procedures such as customs and documentation while others involve logistics services and banking and financial procedures, as discussed in Chapter one. In many cases, a lack of institutional capacity and regulatory policies can lead to higher costs and delays.

Customs and Border Agencies

In many developing countries the customs processes can be a major impediment to trade through inefficient procedures and corruption.

Weak Customs Procedures

Developing countries are often known for inefficient and sometimes irregular customs practices that delay the shipment of goods. Weaknesses and characteristics of custom practices in developing countries that lead to the inefficient clearance of goods and additional costs include:

- ***Irregular Customs Practices*** - Irregular customs practices, involving the arbitrary interpretation of customs regulations and application of the inspection process, are thought to be the single largest impediment to trade expansion and cost for international shippers. Ineffective customs practices can sometimes be traced to a lack of understanding of inspection procedures on the part of officials charged with conducting the inspections, which can cause undue cargo delays at onward points of the shipment. Additional costs can be generated by cargo immobilization, bribes and unofficial charges applied to consignments. Vested interests in old systems hamper the development of efficient, time definite logistics systems required to compete in the complex just-in-time shipping environment of today.

- ***Physical Inspections*** – An additional problem with customs procedures in developing countries is an over-reliance on time-consuming physical inspections. This can lead to the immobilization of cargo, which can result in trucks idling in queues at the border (which leads to higher fuel costs and increased breakdowns) and accrued cargo handling or storage fees for goods that must be transferred from transport vehicles to inspection locations or kept in storage until time of inspection. Longer inspection periods also increase the chances that cargo will be pilfered or damaged during the inspection process. Most critical, however, is the fact that goods waiting to be inspected incur inventory carrying costs and disrupt the functioning of supply chains and distribution networks if not properly planned for.

  Physical inspections can also affect the final fate of a shipment of goods. In their study of trade facilitation in the CIS, Molnar and Ojala illustrate examples of customs officials breaking the seals on containers, because they do not believe in the integrity of the previous customs authorities. Once the

cargo has been breached, it is subject to further examination and delay throughout its journey and subject to intense scrutiny by the buyer.[14] The breaking of container seals for multi-country transits and specific transit regime regulations is in breach of the international conventions instituted for the purpose of facilitating the transit of goods in the first place. As international traffic flows and congestion increase, border facilities and procedures require improvement and harmonization in order for costs to remain manageable and predictable.

- ***Problems with Customs Documentation*** - Other key non-transport drivers of higher transaction costs include documentation and data sharing requirements. In a process involving multiple languages, multiple forms and multiple copies, delays in the documentation process can significantly add to transaction costs. The impact of customs procedures is much more prevalent on import procedures than export procedures due to the revenue generation characteristic of import processing and duty collection. Export procedures tend to be more streamlined than import procedures, without issues of goods valuation and stringent health and safety inspections. Typically, if documentation is in order, exported goods may be cleared in one day, whereas import clearance may require anywhere from one week to ten days for ocean shipments when there are problems with documentation. Customs officials are generally chartered with the goal of maximizing collection of customs duties and taxes while export clearance relies only on achieving export volumes and statistics collection to manage balance of payments figures.

  Simplification of documentary trade procedures has long been a goal of international shippers. The World Trade Organization (WTO) estimates that between 4 percent and 6 percent of the total cost of goods in an international transaction is the result of creating, managing and presenting international trade documentation. Nearly one half of all trade documents presented to banks for documentary credits are rejected on the grounds of document inconsistencies. While the cost of documentation is an issue in both developed and developing countries, shippers in developed countries are seeing results from their investments in automated systems to produce standardized and consistent trade documents. Developing simplified and harmonized documentation to support the movement of cargo throughout the supply chain is one of the keys to achieving successful integrated transport. Document simplification and harmonization is even more important for landlocked nations requiring inland carriage through neighboring countries. Common documents meeting the data requirements of the transit countries could alleviate costs of document production, customs inspection and cargo immobilization.

- ***Lack of Automated Systems*** - The lack of automated customs computer systems and connectivity between customs locations is a severe impediment to the free flow of cargo. Automated systems promote the implementation of clearly defined customs procedures, which helps eliminate customs malpractice and irregular payment schemes while improving effectiveness of operations

  Automated computer systems serve to increase transparency and institutionalize procedures and can maximize duty and tax collections in an era of falling duty rates. Such systems also help promote cooperation and coordination between customs offices and customs authorities. Sharing shipment data between offices helps to reduce smuggling, illegal immigration, and "risky" shipments while streamlining operations for law-abiding and reliable shippers. Automated systems facilitate the high level of coordination and shipment data collaboration needed in today's environment, which includes targeted inspection regimes and pre-clearance procedures.

[14] Molnar and Ojala (2003).

Customs and Corruption

In countries where facilities are limited, congestion high, and transparency at a minimum, widespread demand for bribes to expedite cargo movements is more likely.[15] The authors of a study of Mozambican manufacturing practices found that 45 percent of those surveyed had been solicited to pay or paid a fee not otherwise required by law. [16] There appears to be a high correlation between a country's "logistics friendliness" (the ease of arranging international freight movements to/from a particular country) and the degree of corruption that exists.[17] Logistics friendly countries tend to have less corruption. Thus, exporting producers in countries with higher levels of customs corruption face either higher transaction costs associated with making unofficial payments or face higher inventory carrying costs linked to excessive delays at border crossings. Enhancing customs processes would assist in reducing opportunities for corruption.

The goal of a professional customs organization is at the heart of building a solid trade facilitation program. Without appropriate training of historically under-paid, under-appreciated and poorly trained staff in an era of increasingly complex logistics operations, the training and accreditation of customs staff is of paramount importance. Transparent procedures and regulations, automated customs systems, and well-trained customs officials, reduce costs for shippers while increasing country revenues and foreign trade volumes.

Poor Dissemination of Regulatory Information

Predictability and consistency are fundamental cornerstones of a competitive transport and logistics system. Clear, accurate, reliable and timely information on trade-related regulatory information is required for trade support service providers to plan and make decisions necessary for movement of goods from one country to another. In many developing countries such information on trade legislation, procedures and documentation is not readily available to international shippers, forwarders and carriers. This lack of information can have multiple affects:

- Poorly defined and disseminated explanations of rules increase the probability of abuse on the part of customs officials;
- Trade operators may face significant penalties, administrative appeals or bribes due to "mistakes" resulting from their lack of knowledge;
- Shipment delays and higher cargo immobilization costs can be incurred as shippers obtain proper information and take steps to comply with unexpected documentation and procedures;
- Non-disseminated changes in legal and regulatory frameworks expose operators to high degree of liabilities that get passed on to the shippers, raising transaction costs.
- Uncertainty over legal and regulatory structures can retard foreign investment in developing countries and make it more difficult to attract competitive service providers with world-class logistics know-how.

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[15] Hare, P. (2201), "*Trade Policy During the Transition: Lessons from the 1990's*," The World Economy (24)4. It should be noted that corruption by customs officials is detrimental not only to international shippers seeking cost efficient, predictable distribution channels, but also government revenues on whose behalf these officials work.
[16] Biggs, T., Nasir, J., and Fisman, R. (1999), "Structure and Performance of Manufacturing in Mozambique:, RPED Paper No.107.
[17] Molanr and Ojala, (2003).

Although the additional expenses caused by poor dissemination of regulatory information generally do not vary according to the value of the goods or the volume of the sales, they can increase the operational cost per unit. These costs put firms that must bear the cost of these information gaps at a disadvantage.

Transport Intermediaries

The efficiency of international shipments depends on the handling agent's ability to navigate through a multitude of institutional impediments. While door-to-door intermodal shipments are an attempt to create a single link between buyers and sellers, there remain many players in the process that move goods across borders. With more than 40 transport intermediaries involved in a single international transaction, the knowledge, sophistication and efficiency of these operators are key to delivering time-definite, price-competitive goods

The complex and variable regulatory and institutional environments in which transport intermediaries and cargo handlers work are common factors constraining the timely clearance of goods. Just within the confines of airports and seaports, from terminal gates to loading docks, the myriad of customs procedures, administrative requirements and cargo handling can cause wide variation in clearance times (from a half day to 20 days).

Forwarding and Logistics Services

Global freight forwarders are typically confronted with technical barriers to market access in foreign countries. Many countries require foreign operators to obtain licenses or permits to operate in their territory. As licenses are often difficult or costly to obtain, many of the global freight-forwarding firms engage in the creation of a global network of partnerships to provide customers door-to-door delivery services. Those foreign operators who do obtain permits to operate are often required to pay a security deposit that is considerably higher than that paid by local operators. This penalty can have a detrimental effect on small and medium-sized foreign companies which may possess high-quality, price-competitive services that would stimulate developing countries local practices.

Today, transport intermediaries in developed countries largely reap the financial benefits of providing transport support services for door-to-door transport services. The competitiveness of these companies, their shipping management systems, their international coverage, their liability provisions, and the backing of financial institutions and insurance companies all contribute to the dominance of companies from large developed countries. In order to build a similar global capacity, developing countries need to provide a competitive landscape in the inland transport services and transport intermediary services that will allow the freight forwarding industries to flourish under competitive market pressures and open access to the international network. Highly skilled, competent and efficient transport intermediaries operating in an improved institutional environment provide lower overall transport costs and raise country competitiveness.

The development of transport and logistics services is crucial for developing countries to meet the demands of an increasingly complex international trading system. In general there has been a shift in focus, from the transactional aspects of managing and coordinating transportation activities to integrated supply chain management that enables reliable, consistent, and cost-effective time-definite delivery. Compared to developed countries, services in developing countries can be of poor quality and may not meet the standards of recognized associations such as The International Association of Freight

Forwarders (FIATA). As a result, cargo is often lost, damaged or delayed, creating additional costs for shippers.

As logistics intermediaries take on additional services and control of the overall freight movements the result is a greater need for control and coordination by the service providers. Typically, forwarders in developing countries provide a limited set of services in a single country and do not possess the global network that more sophisticated multimodal logistics services require. As a result, shippers often must enter into arrangements with multiple transport intermediaries for each country along the transport route. Such a fragmented arrangement can cause a lack of accountability and liability. In addition, shippers may have to pay increased administrative costs to manage multiple suppliers, who often require advance payment for their services. Full-service supply chain logistics providers offer shippers more competitive rates, greater service and accountability with less administrative burden.

Intermodal Logistics Services

Intermodal logistics involves transport of freight using two or more modes of transportation. The movement of goods is managed as a single continuous transaction under a single through-bill of lading. Intermodalism substantially increases the velocity, control and quality of the cargo, thanks to major reductions in cargo handling time and fewer issues of cargo immobilization. Multimodal transport remains primitive in developing countries that lack the specific legislation and regulatory framework required to address the rights and responsibilities of the multimodal transport operator as well as the carriage contract across various modes. The global legal framework governing multimodal transport is fragmented and complex. This creates uncertainty and higher transaction costs resulting from legal and evidentiary inquiries and higher insurance fees. No uniform international regime is in force to govern the liability for the loss, damage or delay of intermodal cargo.[18] The current framework is a patchwork of unimodal agreements, laws and standard contracts that require shippers to apportion the liability to the mode of transport under which damage, loss or delay occurred. This lengthy and costly process adversely affects small and medium-sized shippers without the leverage to negotiate favorable carriage contracts across all modes.

Banking and Financial Practices

Trade in goods involves a number of financial transactions and instruments such as trade insurance, documentary collection, and letters of credit. Depending on the level of competition and regulations within the banking and financial sectors, the costs of these key trade instruments can quickly add up. Many countries don't have adequate facilities to provide the types of credit and insurance which are integral to the international trade process. This is partly due to generally underdeveloped financial systems and high interest rates, which in turn limit the development of intermediaries able to provide local financial trade support services. Furthermore, currency restrictions that restrict the use of and access to foreign currencies increase transaction costs. An environment that includes strengthened financial and insurance sector regulations, privatized financial institutions, and free access for foreign companies in the financial system would help improve the provision of trade-related financial services.

[18] UNCTAD, "Multimodal Transport: The Feasibility of an International Legal Instrument." Report by UNCTAD to the Secretariat UNCTAD/SDTE/TLB/2003/1. January 2003.

Insurance

International trade insurance is an important component of the total export transaction cost, accounting for up to 10 percent of the export transaction costs in some cases. High pilferage rates and increased security risk can raise the cost of insurance in developing countries. In addition, many developing countries require the use of local insurance intermediaries, which may lead to fragmented local insurance providers or, in some cases, double coverage.

Typical insurance rates are calculated on a per commercial invoice value. The value of the insurance premium includes the FOB cost of goods plus freight. Not only may origin or destination be a driving factor in insurance premiums —the type of cargo may also be the driving factor. A standard set of rates obtained by CARANA for Singapore Airlines, by trade lane (before markup) is included in Table 16.

Table 16: Sample General Cargo Airfreight Insurance Rates

From/To	Asia	Africa, Middle East, New Guinea	Europe	North America	South America	Australia & New Zealand
Asia	0.1100%	0.1650%	0.1650%	0.2475%	0.2475 %	0.1650%
Africa, Middle East, New Guinea*	0.1650%	0.1210%	0.2090%	0.2475%	0.2475 %	0.2475%
Europe	0.1650%	0.2090%	0.1210%	0.2475%	0.2475 %	0.2475%
North America	0.2475%	0.2475%	0.2475%	0.1210%	0.1210 %	0.2475%
South America	0.2475%	0.2475%	0.2475%	0.2090%	0.1210 %	0.2475%
Australia & New Zealand	0.1650%	0.2475%	0.2475%	0.2475%	0.2475 %	0.1210%

Table 17: Maritime freight Shipping Insurance Quotations

From/To	General Merchandise	Computer Hardware & Software (excluding chips & memory modules)	Non-Perishable Foods	Precision Instruments	Chemicals and Hazardous Materials
Bolivia	0.46%	2.41%	0.98%	1.76%	0.85%
Mozambique	0.46%	2.41%	0.98%	1.76%	0.85%
Vietnam	0.46%	2.41%	0.98%	1.76%	0.85%
Jordan	0.46%	2.41%	0.98%	1.76%	0.85%
Senegal	0.46%	2.41%	0.98%	1.76%	0.85%
St. Lucia	0.46%	2.41%	0.98%	1.76%	0.85%

Insurance rates for shipments are generally billed based on the payment terms of the transaction. The maritime shipment insurance premiums are based on issuing location and the nature of the goods. In some cases there are standard insurance premium rates by product for all destinations. Larger insurance providers have greater liability pools and may offer better rates. Products and not countries are the determinant drivers of rates. Table 17 provides a list of quotes collected by CARANA shows how rates do not necessarily change by distance traveled, but can be affected by the type of goods shipped.

Chapter 3: Addressing Trade Support Services in Developing Countries

Overview

In an international economy where a buyer's decision to purchase a good can depend on marginal difference in prices, gaining real access to international markets requires that countries and companies alike take efforts to become more competitive. Removing tariff and non-tariff barriers has helped to level the playing field when it comes to competing in international markets, particularly in the industrial countries.

Many developing countries, with the help of international donors, have engaged in various initiatives to enhance their competitiveness through macroeconomic policy reforms, improving the competitiveness of domestic firms and supply chains, investment in new technologies, and export-oriented development programs. While such initiatives will and should remain important components of national strategies for economic development, the overall effectiveness of these initiatives will be limited without efforts to address the high transaction costs tied to the movement of trade goods.

Developing countries that do not address transportation and other trade services challenges will face a serious impediment to expanding exports, attracting investment and facilitating economic growth. In this, developing country governments and associations, as well as international trade and logistics organizations and international donors, have a role to play. These initiatives are necessary at a number of levels, most importantly in the global and national markets for trade support services. This chapter describes efforts that have been or could be applied to help countries address the issues noted throughout this paper so that they can begin improving trade services efficiency and reduce transaction cost. It discusses efforts at the global level, particularly within the auspices of the WTO to reduce regulatory barriers, and it provides a roadmap for country specific analyses that can facilitate the development of national strategies to enhance the provision of trade support services.

Global Efforts to Facilitate Trade Support Services

Trade support services are global in nature, and thus any effort to reduce facilitate trade support services should involve a global approach. Recognizing the importance of the issues discussed in this paper, numerous international organizations have called for trade facilitation efforts to enhance the smooth movement of trade, particularly with regard to removing the administrative barriers that increase the probability of high transaction costs and delays, as demonstrated in the statements below:

- ***WTO and UNCTAD***: "Simplification and harmonization of international trade procedures, including activities, practices, and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade." (WTO website and UNCTAD, E-Commerce and Development report 2001, p 180)

- ***OECD***: "Simplification and standardization of procedures and associated information flows required to move goods internationally from seller to buyer and pass payments in the other direction" (OECD, TD/TC/WP (2001) 21 attributed to John Raven)

- ***UN/ECE***: "Comprehensive and integrated approach to reducing the complexity and cost of the trade transactions process, and ensuring that all these activities can take place in an efficient, transparent, and predictable manner, based on internationally accepted norms, standards, and best practices" (draft document 3/13/2002)

- ***APEC***: "trade facilitation generally refers to the simplification, harmonization, use of new technologies and other measures to address procedural and administrative impediments to trade." (APEC Principles on Trade Facilitation 2002)

- ***APEC***: "the use of technologies and techniques which will help members to build up expertise, reduce costs and lead to a better movement of goods and services" (APEC Economic Committee 1999)

Trade Facilitation and the WTO

There have been numerous international attempts to address the issues noted in the statements above. In the past, measures to promote trade facilitation measures took place within the UN, UNCTAD and UN-ECE, however measurable results were not achieved. Increasing focus on these issues in the WTO shows greater promise. The WTO provides a unique platform for improving trade facilitation, mobilizing the political will of countries through multilateral participation necessary to effect broad based change. The inclusion of trade facilitation in the WTO agenda will help bring about the political influence necessary to focus national agendas on customs administration and transport liberalization. The legal predictability and transparency of the WTO commitments is paramount to irreversible bureaucratic modernization, cargo facilitation and improved transport competitiveness.

Trade Facilitation is a key agenda item for the fifth Ministerial meeting in Cancun, Mexico in September 2003. The WTO has been working on trade facilitation issues for many years, seeking to enhance transparency and set minimum standards for customs procedures (such as Articles V, VIII and X). The WTO legal framework has lacked specific provision on trade facilitation for trade support services issues, but during the Singaporean Ministerial Conference, the Council for Trade in Goods was directed to "undertake exploratory and analytical work… on the simplification of trade procedures in order to assess the scope for WTO rules in this area." There is widespread agreement that the benefits of trade services facilitation merit inclusion in the next round of WTO negotiations, with some WTO members calling for new binding trade facilitation rules centered around border and border-related procedures in order to simplify and expedite the movement, release and clearance of goods. New rules should be built around existing commitments to GATT V ('Freedom of Transit'), VIII ('Fees and Formalities Connect with Importation and Exportation') and X ('Publication and Administration of Trade Regulations') and principles of transparency, simplification and non-discrimination.

While the greatest benefits of these trade facilitation efforts may go to developing countries, their capacity to quickly implement new commitments may be limited. The binding rules of the WTO do not mandate that countries enter into commitments that they are not able to implement. The flexibility of the WTO process enables developing countries to take on new obligations at a pace that fits their trade flows, infrastructure and existing legal commitments without placing them in a position to face overwhelming dispute settlement procedures resulting from a lack of implementation capabilities. While this flexibility is important for developing countries, it is important that they aggressively implement changes in the area of trade services liberalization in order to promote their own competitiveness and export growth. The longer trade support services in developing countries remain immature and regulatory or market access barriers continue increase transaction costs, the more the competitiveness gap between developed countries will widen.

Specific Trade Services Liberalization Efforts

At the same time that that discussions over trade facilitation measures are taking place in the WTO there has been movements toward the liberalization of trade services markets. Since June 2002, countries participating in General Agreement on Trade in Services (GATS) negotiations have been exchanging bilateral requests in accordance with the DOHA Ministerial Conference in order to address liberalization in Maritime Transport Services, Air Transport Services, Land Transport Services and Services Auxiliary to all modes of transport. Specific efforts, or the lack thereof, in some of the topics noted in Chapter Two are discussed below.

Maritime Transport Services

Maritime transport services were the subject of extensive negotiations following the Uruguay round under the Negotiating Group on Maritime Transport Services (NGMTS) under the Council for Trade in Services. The negotiations were not completed, but a foundation based on a three-pillar model of maritime transport services, maritime auxiliary services, and port services was developed. The inclusion of a fourth pillar – multimodal transport – has been recommended. It has been agreed that significant barriers to trade and investment in the provision of maritime transport services exist in many member countries and that progressive liberalization steps eliminating market access should be pursued. Four key sectors that have been highlighted for action include:

- ***Restrictions on commercial presence*** - Restrictions on establishing a commercial presence remain in many countries because of the horizontal commitments of countries in the GATS service schedules. Restrictions include entry of foreign capital, domestic equity participation obligations, joint venture arrangements and other legislative and regulatory restrictions on foreign presence.
- ***Restrictions on access to international maritime services*** - Restrictions on cargo allocation for particular routes, in accordance with bilateral and multilateral agreements, remain a prohibitive barrier to access to maritime services. The preferential treatment of shipping services providers from specific economies on the basis of bilateral agreements or other reasons raises the overall cost of shipping services. Restrictions for carrying government cargo on national flag vessels, with the exception of defense and national security cargoes, also serve to limit overall access to the provision of services. Finally, discriminatory tax regimes and port fees for foreign companies and foreign flagged vessels are contrary to the GATS doctrine of non-discrimination.
- ***Non-tariff barriers in the maritime transport sector*** - Anti-competitive business practices raise costs to free and efficient trade. For example, practices such as unreasonable environmental and

safety regulations, unfair vessel and cargo examinations and cumbersome port procedures excessively discriminate against foreign transport suppliers.

- ***Competition policy in maritime transport sector*** - Price fixing and capacity sharing agreements of conference carriers that receive anti-trust exemption serve to restrict growth of new transport providers and control cost reduction movements.

There have been several member country requests for the inclusion of empty container repositioning (cabotage rights) and the right to provide feeder services in an effort to increase operational efficiency, support multimodal operations and lower costs for international shippers. The scope of the negotiations to cover the binding of existing liberal practices, extend liberalization to ports and auxiliary services and the inclusion of a multimodal framework are driving the current discussions. Specific commitments, by country, in the maritime transport services are provided in Appendix Three.

Air Transport Services

At present, most of the air transport sector issues — traffic rights and services directly related to traffic rights — have been excluded from the coverage of the GATS. However, the GATS mandates a review by members of this situation. The purpose of the review, which started in early 2000, is to decide whether additional air transport services should be covered by the GATS. The review could develop into a negotiation in its own right, resulting in an amendment of the GATS itself by adding new services to its coverage and by adding specific commitments on these new services to national schedules.

Currently only aircraft repair and maintenance services, the sale and marketing of air transport services and computer reservation system (CRS) services are included. The regulation of cargo flights is principally managed through the system of bilateral and open skies air agreements.

Air Express Couriers/Integrators - The current GATS service schedules do not distinguish the unique services performed by the integrated air carriers (express couriers) from other airfreight providers. Air express couriers are viewed as courier services and therefore are classified under the "communication services" sector along with classification under the postal services and telecommunications sectors. The services offered by air express couriers, however, require special consideration, recognizing the distinct services they provide in the airfreight market as all-cargo express transportation providers. The GATS does not provide a single category covering integrated carriers required to physically cross national borders to complete the service. As a result, the operations of the integrated carriers are defined with reference to multiple GATS service sectors and sub-sectors including "courier services" and "land transport" creating the perception that integrated service providers are competing with individual local trucking companies or courier services that do not provide the international door-to-door services. In many cases, the integrated carriers must contract out the local delivery and pick-up operations to local providers, reducing efficiency and effectiveness of their time definite services and raising costs to buyers and sellers.

Air express couriers have put forward numerous suggestions in the area of customs procedures to facilitate the express provision of their services to meet their customer commitments. Among these recommendations for action are:

- Electronic filing capabilities of customs documentation;
- Expedited clearance for all non-dutiable goods;
- Expedited clearance for cargo arriving under the status of "express" shipments;
- Elimination of mandatory customs inspections subjecting express shipments to random inspection;

- Harmonization of customs documentation and customs data requirements; and
- Increased transparency of customs regulations and procedures for simplified clearance, including expedited mechanisms for appeal of administrative decisions and determinations.

A categorization covering all of the services provided in the cargo delivery process — including airfreight transport, customs clearance, land transportation and ancillary air services of ground handling and aircraft repair and maintenance — is needed to increase the efficiency and reduce the costs of this increasingly important mode of goods movement.

Land Transport

The growth of intermodal operations requires the development of liberalized land transport services. Land freight transport is already subject to the GATT rules and is already supported by an initial body of jurisprudence:

- Article III.1 stipulates that "rules, regulations and requirements affecting … the internal transportation of products … should not be applied … so as to afford protection to domestic production";
- Article III.4 establishes national treatment of inland transportation according to the means of the transportation and not the nationality of the products.

Upcoming negotiations will likely include specific justification for freight transport restrictions on consumption abroad (mode 2) and commercial presence (mode 3) for the sector-specific commitments. Maintenance and repair of road and rail transport equipment also will be considered in the negotiations with the possibility of exemptions/restrictions on a case-by-case basis. The lack of harmonization between countries' fiscal charges on excise duties on fuel or road use charges and technical regulations governing weight limits and safety standards remains an impediment to smooth country transit. The most crucial issues associated with road transport surround trade facilitation issues and border crossing efficiency. Country-specific information on road transport liberalization commitments can be found in Appendix Four.

Services Auxiliary to All Modes of Transport

As noted in Chapter Two, the suppliers of auxiliary services face market access and national treatment barriers. Services auxiliary to all modes of transport include cargo handling, storage and warehouse services, freight transport agency services, freight brokerage services, document preparation, packing and unpacking and local delivery services. Although the transport services industry is moving towards multimodal operations, most services are organized around single modes of transport. Part of this is due to regulatory constraints. For example, freight forwarders and other transport intermediaries face administrative barriers to entry by countries that require them to obtain special permits and licenses. To date, no developing country has completely opened its markets to foreign service providers, maintaining limits on foreign equity participation and joint venture agreements. A few countries have liberalized sub-sectors of auxiliary services. A framework addressing the needs of combined transport would be an important tool for developing efficient transport networks. Future rounds of liberalization will seek to extend these rights to more countries and across more sub-sectors.

National Efforts to Enhance Trade Support Services

Although efforts to reduce constraints to the provision of trade services at the global level will help to reduce transaction costs and enhance trade competitiveness, many drivers of inefficient and costly trade support services are rooted in weaknesses and constraints within the context of developing countries' national borders. Thus, developing countries seeking further integration into the global economy must take efforts at the national level to remove institutional, procedural and market impediments that impede the efficient provision of service as well as strengthen the overall capacity of trade support service providers operating within their borders. In doing so, countries will be able to reduce many of the bottlenecks and inefficiencies that lead to higher trade transaction costs. Ultimately, this involves placing a higher priority on trade facilitation and including trade support services initiatives in national development plans.

Need for Country-Specific Analysis

Prior to developing a national strategy to enhance the provision of trade support services, however, it is important to evaluate the particular conditions and market environment in which service providers operate. As noted throughout this paper, the costs of trade support services are highly variant by country, direction of trade, commodity shipped, mode of transport used, size of consignment and various other factors. Each country has its own bottlenecks, policy constraints, market failures, and levels of infrastructure and logistics development that affect the transaction costs of goods moving from its respective ports/airports/borders. For this reason, the analysis of the issues discussed in this paper are necessary at the national level in order to benchmark the competitiveness of trade support services in a specific developing country, to determine strengths that can be enhanced and to identify constraints that should be addressed. Such a study would include a constraints analysis covering various modes of transport, intermodal networks, infrastructure, customs practices and procedures, trade-related banking and financial practices, transport intermediaries, and the overall development of a country's transport and logistics system. The results of this analysis could be used for the development of comprehensive competitiveness initiatives tailored to facilitate the development of more cost effective and efficient services to support trade competitiveness.

Roadmap for Trade Support Services Analysis in Developing Countries

Due to the complexity of international transport and logistics networks, the number of international players involved in a single transaction, and the number of points in the supply chain that can incur costs and delays, it is very difficult to benchmark the competitiveness of trade support services. The conditions of international transport and logistics are constantly evolving to meet the needs of new market demands. Couple that with new security concerns and the analysis of trade support services' competitiveness benchmarks becomes even more daunting. Nevertheless, through investigating the right issues and asking the right questions, it is possible to develop a number of activities that will strengthen the trade support services sector.

The following section provides a framework that can be used to capture baseline data that will enable the identification of source of bottlenecks and higher transaction costs in developing countries. Through the application of "issue identifiers," this "roadmap" provides guidelines for evaluating conditions within the trade services sector and the identifying some of the key issues discussed in Chapter Two. Specifically, these identifiers address:

- Issues within particular modes of transport
- Issues within the intermodal integration of different modes of transport, and
- Non-modal issues

Within each topical area, this section present a brief description the key drivers discussed in Chapter Two, a list of possible sources of information, and a worksheet listing issues and identifier questions used to evaluate the significance of those issues. These issue identifiers will determine factors that affect both time and costs throughout the trade transaction. The section discusses for each topic a brief hypothetical analysis and provides possible interventions that could be applied as part of an overall national strategy to enhance the provision of trade support services. Some of these interventions involve actions at the national level while others include initiatives that would require further efforts at the global level.

Maritime Transport

As noted earlier, maritime transport is an important mode of transport for goods from developing countries. At the core of the growing intermodal transport market, problems within the shipping industry and its auxiliary services can have a dramatic impact on the overall time that a good remains in transit and final landed cost of that good. Directional imbalances and anti-competitive practices such as conference carrier agreements can distort the prices customers pay for the maritime portion of a shipment, as can high cargo handling costs. Weak regional transshipment systems and poor feeder services may only affect not overall cost but also increase transit time as time is spent shipping goods to hub ports in order to gain access to main shipping lanes. Weak port infrastructure can limit shipping capacities and lead to longer port calls. Worksheet One provides guidance to identify issues within the Maritime Industry. Primary sources for the issue identifiers in this area would include port authorities, local and international shipping firms, freight forwarders, port services providers and marine freight customers

Worksheet 1: Maritime Transport	
Issue	**Issue Identifiers**
Empty backhaul and equipment utilization patterns	1. What are the relative import vs. export volumes? 2. What types of goods are shipping in each direction? Manufactured goods? Bulk goods? High value goods? Perishable goods (refrigerated)? 3. What are carrier equipment issues for the region?
Transshipment patterns and feeder service impacts	1. What are the regional shipping patterns and major carrier routes? 2. What are the regional shipping patterns? 3. What are trade volumes of neighboring countries? 4. What is the current port capacity? What types of cargo are currently managed? Containerized or bulk?
Port capacity and infrastructure condition affecting service efficiency	1. What are current capacity requirements? How many containers ship per year/ month/ week? 2. What is the average vessel dwelling time in port? 3. How modern is current infrastructure? 4. How often is equipment out of service? 5. What are maintenance and repair procedures?
Port privatization and cargo handling costs	1. What model are the ports operating under? Privatized? Public ownership of land and infrastructure? Parastatal port services provision? 2. Is there competitive bidding for the provision of these services? 3. Are restrictive labor practices raising costs of service? 4. Do foreign operators have access to the market?

hipping agent erformance and vessel well time	1. What is the relationship of shipping agents to carriers, customs and shippers? 2. Is electronic data collaboration available via EDI? 3. What is the average time of a port call and how does it compare to other regional ports?

Hypothetical Analysis and Intervention in Maritime Services

Analysis		Possible Intervention
A directional imbalance exists, such that imports dominate the trade movements, leading to empty backhauls	→	Liberalize cabotage to allow for the repositioning of equipment and more efficient utilization
Country does not trade enough goods to attract larger maritime service providers, thus limiting its capacity	→	Development of transshipment feeder services through collaboration with regional hub service or market incentives to encourage develop supply of smaller shippers able to make more frequent trips to transshipment hubs
The costs accrued at the one main port seem high. The port is run by a public authority where only local services providers have access to the market	→	Gradual privatization of port authority. Encourage private port service handling and auxiliary provision. Open market access to foreign service providers
The loading, unloading and customs process seems long and the integration of different activities is weak	→	Implementation of electronic data interchange (EDI) systems, electronic customs clearance systems and collaborative communication between shippers, transport provider agents and customs authorities

Case Study: Reducing Costs and Improving Efficiency in Argentine Ports

In 1990 Argentina began reforming port operations to improve competitiveness. At that time ports were costly and inefficient with restrictive labor regulations, overlapping regulatory controls and outdated cargo handling facilities. Key liberalization steps included:

- Open bidding processed for Port concessions;
- Terminal contracting opened to the private sector;
- Pilotage and towing services deregulated;
- Cabotage rights granted to carriers;
- Ship-owners allowed foreign registries; and
- Existing labor agreements were abolished.

Selected Performance Indicators for the Port of Buenos Aires

Indicator	1991	1995
Cargo (thousands of tons)	4,000	6,000
Containers (thousand of teu's)	300	540
Capacity (thousand of containers per year)	400	1,000
Productivity (tons per worker per year)	800	3,000
Average stay for full containers (days)	2.5	1.5
Cost for container imports (US$ per ton)	450	120
Port tariff for exports (US$ per ton)	6.7	3.0
Port tariff for imports (US$ per ton)	2.1	1.5
Source: World Bank, December 1996		

Key Results:

→Shipping rates decreased from 30 to 70 per cent
→Port service rates decreased;
→Towage rates fell by 40%;
→Pilotage rates decreased;
→Stevedoring tariffs decreased
→Port capacity greatly increased

Air Cargo Transport

While carrying less of developing countries' goods relative to other modes of transport, air transport is an increasingly important component of their transport and logistics infrastructure. For landlocked countries with no direct coastal access, a sound air transport regime is important to gain rapid access to international markets. Barriers to market entrance and pervasive regulatory and legal rights to establishment of foreign carriers keep lift capacity limited and prices high. Issues such as seasonality and reliance on passenger traffic can lead to fluctuations in prices and cargo capacity. Problems within cargo handling and storage systems may lead to higher costs and time delays. Worksheet Two provides guidance to identify issues within the Air Transport Industry. Primary sources for the issue identifiers in this area would include airport authorities, national and international air carriers (cargo, passenger and express), government regulatory bodies, cargo storage and handling authorities, freight forwarders, intermodal services providers and airfreight customers.

Worksheet 2: Air Cargo Transport	
Issue	**Issue Identifiers**
.iberalization of civil viation restrictions and .ift capacity and supply of ervice capabilities	1. What are the current bilateral or Open Skies agreements in place? 2. How many carriers service the country? 3. How many flights per day/week are available to major trading partner hubs?
›easonal variation and lemand fluctuation	1. What are seasonal trade volumes by good and by month? 2. What is current passenger seasonality?
Cargo handling restrictions nd costs and Cargo facility adequacy and mpacts	1. Who is allowed to provide aircraft loading and unloading procedures? 2. What are the regulations regarding access to storage and equipment. 3. Who provides equipment repair services? 4. Is cargo handling equipment availability an issue?
Preferential commodity rate levelopment	1. Do preferential commodity specific rates exist for major products that are shipped?
›pecialized air express ourier intermodal equirements	1. Do integrated air carriers serve the country? 2. Are special clearance procedures in place? 3. Are integrated carriers allowed to provide local pick-up and delivery services?

Hypothetical Analysis and Intervention in Air Cargo Transport Services

Analysis		Possible Intervention
There is not enough demand for airfreight for dedicated air cargo flights, yet limited insufficient cargo space on the passenger flights to provide reliable supply for airfreight demand	→	Negotiate more bilateral landing rights or 'open skies' agreements to attract more airlines or flights and increase lift capacity
Trade volumes fluctuate by season. In high volume seasons, cost of freight is more expensive subject to the rules of supply and demand. At high volume seasons, there is insufficient lift capacity.	→	Evaluate current bi-lateral and open skies agreements to promote increased lift capacity during peak seasons.
The national carrier is responsible for cargo handling, as required by regulations. Service is poor leading to delays and is relatively expensive	→	Allow non-carrier private sector operators to provide handling services to all airlines. Open handling services bidding process to private competition
A number of shipment of perishable goods have spoiled on the tarmac while waiting to be loaded onto a plane	→	Through a combination of public and private investment, upgrade infrastructure for cargo storage and management. Storage facilities would need capacity to account for

delayed of canceled flight. Develop cold storage capacity.

Road Transport

As the mode that links domestic producer and supply chains to each other and the international market, the costs and efficiency of road transport have an impact on the overall cost of most, if not all, traded goods. A number of factors within the domestic road transport market (particularly market structure and competition) affect the costs and efficiency. Other factors can have a direct impact on the ability to move goods to where they need to go. Poor infrastructure increases operating costs, which ultimately drive up the overall cost, and requires longer transit periods. Road network designs can determine whether "shorter" distance routes can be utilized for direct travel. A lack of corridor rights can force goods to be offloaded and loaded onto different trucks at the border. Procedures at border crossings can lead to delays and fuel costs. Worksheet Three provides guidance to identify issues within the road transport sector. Primary sources for the issue identifiers in this area include transportation and road maintenance authorities, trucking companies, logistics providers, trucking depots, borders officials, and customers.

Worksheet 3: Road Transport	
Issue	**Issue Identifiers**
Competition in Road Transport Sector	• How many trucking companies are there? • Are there barriers to exit and entry for trucking firms? • What proportion of the trucking fleet is publicly owned or managed • How are prices determined?
nfrastructure	• Is the road infrastructure sufficient to bear heavy vehicles? • Are vehicle operating costs (including repairs) relatively high? • How long does it take to reach market or intermodal transfer destinations?
Road network design	• What does the national highway infrastructure look like? Does it correspond with the patterns of traded goods movements? How does it link to international markets or link to transfer points for intermodal transport?
Transit corridor rights	• Does the country require transit corridor rights? Are they in place?
Driver visa procedures	• What documentation is required for country transit? Is it the same as other transit countries? • Is documentation data shared electronically? • What are the visa requirements for cross border drivers? What is their average waiting time at border crossings?
Safety and environmental tandards	• Are the safety and environmental standards compatible with neighboring countries? • What are the certification procedures?

Hypothetical Analysis and Intervention in Road Transport Services

Analysis		Possible Intervention
Due to poor infrastructure in interior of country, transit time is lengthened. Congestion is frequent important transit destinations (ports). Some locations where key exports are produced are poorly connected to national highway system.	→	Conduct national highway survey to guide development of investment in road network infrastructure based on commerce patterns, movements of trade from interior to borders and maximization of connectivity. Design improved traffic patterns around congestion and transfer points for goods shipments.
Goods shipped across cross-border road links experience long waiting periods at the border. Different documentation and entry rights for	→	Harmonize documentation requirements for both immigration and customs with neighboring countries. Develop electronic customs and immigration procedures at

drivers, vehicles and goods lead to delay. Many drivers must pay officials or arbitrary fines or face excessive delay.		inland borders. Simplify, clarify and disseminate inland regulations and procedures. Implement anti-corruption and professionalism measures among border officials.
Divergent safety and environmental standards impose excessive delay, documentation or restrictions on cross border movements.	→	Harmonize neighbor countries' and transit corridor partners' regulations to ensure smooth movement across borders.

Rail Transport

Although perhaps not as significant as road transport, rail remains a crucial inland link for landlocked countries and intermodal trade. Rail's importance in intermodal transport will increase with the growing use of container trade, as double-stacking trains allow shippers to achieve economies of scale and reduce line haul cost.[19] The amount that a developing country will be able to benefit from this will depend largely upon infrastructure and technical connectivity with rail networks in other countries. Weak rail infrastructures limit rail speed and weight capacity. Different gauges in different countries require time-consuming unloading and loading of goods onto cars that fit proper track gauges. Worksheet Four provides guidance to identify issues within a country's rail services.

Worksheet 4: Rail Transport	
Issue	**Issue Identifiers**
Infrastructure	• Is the rail infrastructure able to accommodate fast-moving trains? • How often are delays or accidents caused by track failure • How old are the locomotives?
Documentation procedures	• What is the average cross border waiting time? • Are rail documentation requirements different than other countries?
Cross Border Compatibility	• Does cargo need to be loaded in and out of other railcars to meet new technical gauge requirements?

Hypothetical Analysis and Intervention in Rail Transport Services

Analysis		Possible Intervention
The national, government owned rail network is old and dilapidated as is the fleet of locomotive and cars. Due to safety concerns and technical limitations, trains must travel slowly. Neither the tracks or trains have capacity for heavy loads	→	Initiatives to upgrade technical capacity and reliability of rails and rail fleet. Partial or entire privatization to facilitate greater private investment in infrastructure. Private management of rail network (through ownership or contract) to improve maintenance of system. Tax and customs waivers for purchase or import of upgraded rail equipment and vehicles
When reaching the border of a neighboring county, containers must be transferred to railcars with the proper gauge. Leads to long periods when goods are not in transit	→	Collaborate with neighboring trading partners to harmonize use of rail cars. Develop rail cargo transfer systems that require minimal equipment retooling at border crossings

[19] It is estimated that double-stacking trains alone can reduce the line haul cost by 60 percent. Delaney, Robert, *The Journal of Commerce*, New York, 21 June 1988).

Intermodal Transport

In response to the need for just-in-time door-to-door deliveries, both buyers and sellers are increasingly relying on intermodal transit operators to transport goods from origin to destination while assuming the liability and delivery time responsibilities, regardless of whether the goods travel under single or multiple carriers or modes of transport. Efficient intermodal networks require connectivity between road, rail, maritime and air transport carriers. Poor intermodal integration, logistics management systems and bottlenecks at transfer points can accrue costs and cause delays that can easily negate the benefits of this increasingly important. Worksheet Five provides guidance on identifying issues within a country's intermodal system. Primary sources for the issue identifiers in this area include freight forwarders, shipping companies from different modes of transport, service providers at intermodal transfer hubs, port, airport and road authorities, customs authorities and customers.

Worksheet 5: Intermodal Transport	
Issue	**Issue Identifiers**
ntermodal integration	• Do intermodal linkages exist? • What is the relationship between agents of different transport modes? • Are there automated systems to manage intermodal logistics? Is electronic data available via EDI? • Is there a regulatory framework governing intermodal transport? Liability provisions? Standardized documentation? • Do special customs clearance procedures exist for intermodal cargo?
Intermodal Connectivity and Ease of Modal Transfer	• How does cargo get transported to ports? Are inland waterways an option? • Do rail services connect to other modes of transport? Are there railheads at ports? • Are there intermodal transfer points available at transport hubs? • What is the average gate entry waiting time for seaports and airports? • Where are the congestion bottlenecks?

Hypothetical Analysis and Intervention in Intermodal Transport Services

Analysis		Possible Intervention
Weak cross modal integration and the lack of modal interoperability from physical and regulatory standpoints leads to increased handling costs and inefficient goods transfer and delivery. Longer relative transit times.	→	Development of management and information systems to facilitate cross modal operations. Establish regulatory frameworks governing modal transport and identifying liability and control obligations.
Excessive waiting periods at intermodal transfer points. Congestion both inside and at entry gateways of transport facilities (ports and airports). Leads to cargo immobilization, higher transport and time (inventory) costs	→	Improved design of intermodal transfer facilities and cross-modal linkage facilities. Combination of public and private investment in equipment required for cargo transfer. Enhanced traffic management and control.
Lack of space to accommodate and manage movement of goods in high volumes at key transfer points	→	Development of inland clearance depot areas. Development of physical, management and information linkages between ICDs and key transport points.

Cargo Handling and Storage Services

As important as the trade support services that actual move goods from one area to another are the activities managing these goods when they are not in transit. Cargo handling is important for the efficient transfer of goods from one transport medium to another, while storage is important for goods that are not immediately transferred to another mode. There are a number of ways in which weaknesses in the provision of these services can affect transaction costs and the movement of goods. Market barriers may limit competition, which may in turn lead to higher handling fees. Poor maintenance of handling equipment can lead to time delays due to breakdowns. Inadequate storage facilities can lead to congestion at transfer points. The lack of sufficient cold storage can result in spoilage of perishable goods. Worksheet Six provides guidance to identify issues within a cargo handling and storage services. Primary sources for the issue identifiers in this area include freight forwarders, shipping companies from all modes of transport, cargo handling and storage service providers at ports, airports and inland transport hubs, port, airport and road authorities, logistics service providers, and customers.

Worksheet 6: Cargo Handling and Storage Services	
Issue	**Issue Identifiers**
Cargo handling	1. What is the average cost and time of cargo handling? Is it on par with regional industry averages? 2. What is the cargo handling equipment maintenance record at various locations? What amount of time is equipment inoperable? Are their legal provisions preventing foreign suppliers the right to the timely servicing and repair of equipment? 3. Do limitations on the provision of these handling services exist? Are providers parastatal companies?
nland Clearance Depot ICD) development	1. Does the country possess ICD's? 2. Is port congestion and storage a major problem? 3. Is the country landlocked, requiring third country transit rights to access ports?
Storage capacity	1. Does sufficient cargo storage at ports, airports, inland locations and private warehouses exist? 2. Are there adequate chilled and cold storage hook-ups at storage locations?

Hypothetical Analysis and Intervention in Cargo Handling and Storage Services

Analysis		Possible Intervention
Cargo handling costs are not in line with regional levels. Lack of competition due to barriers to market entry. Monopoly providers at key transfer points.	→	Measures to increase open concessions and reduce barriers to market entry and facilitate competition.
Inadequate storage capacity leading to damage, pilfering and spoilage. Delays due to congestion and equipment failure and terminal design. Poor management of storage and handling systems lead to undue delays and added costs.	→	Combination of private and public investment in storage and handling infrastructure. Improved design of facilities. Development of automated management systems and procedures to reduce delays.

Transport Intermediary Services

Transport intermediaries provide the services that integrate and manage the various activities required to move goods from their origin to destination. Thus, the efficiency and quality of the provision of these services is key to the entire logistics of the transport system. A number of issues can affect the provision of services. Just within the confines of airports and seaports, from terminal gates to loading docks, the myriad of customs procedures, administrative requirements and cargo handling can cause wide variation in clearance times (from a half day to 20 days). The overall cost and timeliness of these services can depend on the competition, market barriers, global coverage and the standards that services providers, such as freight forwarders, are expected to meet. Worksheet Seven provides guidance to identify issues within the transport intermediary services industry. Primary sources for the issue identifiers in this area include freight forwarders, shipping agents from all modes of transport, customs house brokers, port, airport and road authorities, and customers.

Worksheet 7: Transport Intermediaries	
Issue	**Issue Identifiers**
Value-added service development	1. What services do forwarders and brokers play in the supply chain process? 2. Do transport intermediaries provide additional finishing, manufacturing or distribution functions on behalf of shippers?
Global network coverage	1. Do transport intermediaries have access to the global network of service providers? 2. Are there legal restrictions on the right to partner with foreign providers? 3. Do incentives and information sharing opportunities exist to promote global expansion and coverage?
License and permit procedures of foreign providers	1. What licenses or permits do foreign providers need? 2. How much do permits cost? 3. How long does it take to procure a license or permit? 4. Are financial guarantees required? Are they required by local firms? Are the amounts the same?
Entrenched state monopoly providers	1. Do state-owned providers exist in the market? Do they dominate and restrict entry to other local or foreign providers? 2. Do state enterprises receive preferential treatment?
Service standards and quality	1. Are there any international standards bodies represented? FIATA?

Hypothetical Analysis and Intervention in Transport Intermediary Services

Analysis		Possible Intervention
Barriers to foreign firms' participation in provision of intermediary services exist contributing to non-competitive environment. Higher cost, lower quality service.	→	Promote national treatment of foreign intermediary services operators. Remove licensing requirements on foreign provider divergent from requirements for local providers. Remove requirements for financial guarantee obligations of foreign providers
State-owned providers dominate intermediary services market, setting higher prices for services.	→	Privatization of local intermediary service providers. Efforts to reduce creation of monopolies after privatization. Measures to develop competitive market.
Poor quality of intermediary services and limited international reach to serve multimodal requirements. Delays due to providers' incompetence and antiquated techniques.	→	Development of national standards and certification bodies in conjunction with international standards (FIATA).

Customs and Border Activities

The customs process sits squarely in the middle of international transaction and thus is key in developing efficient trading networks. Within developing countries, there are range of procedures and systems that contribute to longer clearance times and add costs to the overall cost of a good. Potential drivers of delays include the lack of automated systems, lack of document harmonization between countries and inadequate customs facilities. A lack of customs officials' professionalism, complex procedures and poorly disseminated regulatory information can lead to corruption and the arbitrary and irregular application of customs regulations. Worksheet Eight provides guidance to identify issues within the customs clearance process. Primary sources for the issue identifiers in this area include customs officials, shipping agents, custom house brokers and intermediaries involved in the customs process.

Worksheet 8: Customs and Border	
Issue	**Issue Identifiers**
Customs and border facilities	1. Are customs and border facilities linked to one another? Can information be shared quickly? 2. Are immigration, visa and customs authorities co-located? 3. Do excessive clearance times exist at specific locations?
Computer systems integration	1. Are customs and port procedures automated? 2. Does electronic customs filing exist? 3. Are document data requirements harmonized with regional neighbors?
Corruption	1. Do excessive unlawful payments occur at border crossing? 2. Do expected payments match tariff revenues? 1. Is there excessive delay at border locations that may be avoided through unofficial payments? 2. Are customs officials' wages adequate to promote professionalism? 3. To what degree is there transparency in the clearance and payment process? Is the information clearly and readily available to all who require it in a timely fashion?
Automation	1. Are import and export clearance procedures processed electronically?
Professionalism and training	1. What training exists? 2. Are training programs based on modern day customs procedures?
Procedure harmonization and simplification	1. 2. Are documentation requirements standard for all products and countries?
Regulation and legislation transparency	1. Are clearance procedures clearly detailed and are they accessible? 2. Is information available? Are changes published and distributed in a timely manner?

Hypothetical Analysis and Intervention in Customs and Border Activities

Analysis		Possible Intervention
Customs procedures are time consuming. There are various paper documents that must be filled out. Different documents for different countries of origin and products lead to confusion that causes delays. Manual filing systems inefficient and prone to errors	→	Simplification of customs procedures, including reduction of different paperwork requirements. Standardization of forms. Development of automatic customs filing system and information sharing system between countries
Documentation and clearance procedures differ from neighboring countries. Standard forms accepted in some countries not accepted in others	→	Cross country harmonization and standardization of procedures and documentation.

Arbitrary application of fines and bribery widely reported. Many customs officials are poorly paid, lack sufficient education and do not adequately understand regulations they are expected to enforce.	→	Implementation of anti-corruption programs that include professionalization of customs officials, higher wages and punishment for violators. Training for customs officials. Simplification of customs regulations, procedures and documentation.
Information on customs procedures is not readily available and widely disseminated. Delays at borders due to confusion on part of both shippers and officials.	→	Wider publication and distribution of procedures, regulations, documentation and any changes in overall customs process through internet, trade associations, commerce ministries and information leaflets available at borders.

Banking and Finance Practices

Trade in goods involves a number of financial transactions and thus an analysis of various banking and financial practices is crucial, particularly with regards to trade insurance and letters of credit. Depending on the level of competition and regulations within the banking and financial sectors, the costs to these key trade instruments can quickly add up. Worksheet Nine provides guidance to identify issues within the customs clearance process.

Worksheet 9: Banking and Financial Practices	
Issue	**Issue Identifiers**
ocal insurance equirements	1. Are foreign insurance providers allowed? 2. Are local insurance providers price-competitive?
urrency controls	1. Do restrictive currency controls exist that hamper trade growth? 2. Do controls discriminate against foreign providers of logistics services?
etter of Credit and ocumentary Credit rocedures	1. Do developed financial credit instruments exist in local financial institutions? 1. Are they readily available at competitive prices. 3. Do procedures exist that provide timely execution of these financial instruments? 4. Do cumbersome regulatory controls or procedures exist that limit the access or use of certain financial instruments?

Hypothetical Analysis and Intervention in Banking and Financial Services

Analysis		Possible Intervention
Local insurance requirements cause fragmentation of coverage or double coverage. Higher premiums on insurance.	→	Allow greater foreign financial institution involvement in local market. Acceptance of foreign insurance instruments. Allow insurance coverage across all components of transaction
Poor access to credit and underdeveloped financial instruments limits utilization of letter of credits and documentary credit leading to higher financing and payment procedures.	→	Development of financial institutions with increased access and government financial support (Central Bank credit guarantees) for trade credits.

Other Issues to Examine

The list of issues presented above is not exhaustive. Experts conducting the trade support services analysis in each country would determine particular issues that should be analyzed. These may include:

- Trading patterns (with regards to export markets and goods sold)
- Level of industrial development
- Government involvement in the economy
- Business environment
- Market barriers to firms' entry and exit
- Regulation of commercial services
- Availability of credit for new and existing companies (particularly for trade support service providers)
- Development and sophistication of information, communication and technology networks
- Labor regulations
- Security issues

The analysis of these issues is helpful in defining a context in which trade support services operate and identify constraints or sources of additional costs and delays that may not be revealed in the evaluation of the issues discussed above.

Developing a National Strategy to Enhance Trade Support Services

Through the analysis of the trade services sector it is possible to begin the development of a national strategy to reduce trade-related transportation costs. Even if such a strategy is already in place, an analysis utilizing the roadmap above can enhance the course of action by providing more information to the decision-making and implementation processes. The process of developing any national strategy will differ from country to country; however, the following section will provide guidance of how to use country-specific analyses to facilitate the strategy-building process.

Identify Stakeholders

Throughout the country-specific analysis, a number of key stakeholders will be identified. This will include government officials and regulatory bodies (customs authorities, trade, transportation and finance ministries) who will be the overall stewards of the plan, services providers (public and private), the firms that utilize trade support services, business and trade organizations and NGOs involved in trade issues. These stakeholders will not only involve parties from the country in question, but also representatives from international firms in neighboring countries (particularly in regard to landlocked countries) that are involved in the movement of goods in and out of the country. In many cases, a country may wish to involve the participation of international donors such as USAID, the World Bank and regional development banks, as well as international organizations such as the WTO and UNCTAD.

Prioritize / Sharpen Issues

Through cooperation with various identified stakeholders, government decision-makers should use the results of the analysis to assess and prioritize issues. This will include highlighting drivers providing the most significant impediments to the efficient movement of goods. Such prioritization might include major issues that may take years to resolve or smaller problems where solutions with desirable results can be

implemented in a short period of time. In addition, priorities will include issues that affect the wider national development agenda.

Once the issues are prioritized, experts will need to go back to the source of a particular problem and gain more "issue- specific" information that could not be addressed in the broader country-specific analysis. Sharpening the issues will facilitate the development of effective strategies.

Develop an Action Plan

Once issues have been prioritized and further analyzed, stakeholders and government decision-makers will need to develop a clear approach of how to address the key issues. Although the implementation of particular solutions will involve separate initiatives (for example, to address road transport as opposed to maritime services or customs procedures), it is important that these initiatives be as complementary to each other as possible to move the trade support services sector in the same direction. Critical in this aspect are issues of timing and sequencing.

The action plan should identify where resources for particular initiatives will come from and who will be responsible for the overall implementation. Key in this determination is the role of the private sector. Ideally, the private sector will play an active role in financing initiatives (particularly involving investment) and in carrying out the action plan. An action plan would also discuss potential roles of international actors, including transnational firms, donors and trade organizations throughout the implementation period. Because of the integrated nature of the international trade system, the various logistical and information linkages and different regulatory environments, it is important that international parties actively involved in a country's trade be included, even if only on an advisory basis. International involvement can also serve as an important source of both private and donor funds.

The trade services sector does not operate in a vacuum. As noted in the previous section, there are factors not directly related to the provision of trade services that could affect the overall market environment for the provision of trade support services. If stakeholders believe that particular efforts in these areas could facilitate the effectiveness of the national trade support services strategy, related initiatives should be included as part of the plan.

Monitoring and Evaluation

As a country implements its trade support services strategy, it is important that it monitors the ongoing conditions in the trade supports services sectors. This would require further application of analysis frameworks like the one presented in this paper. The issue identified in the country-specific analysis could be used a benchmark to measure progress. Not only will monitoring and evaluation provide information on the overall impact of the strategy's implementation, but it will also provide a means by which emerging problems can be identified.

Appendix 1: Primary Resources

Freight Forwarders (who provided responses):

Kuehn & Nagel (Bolivia)
Kuehn & Nagel (Guatemala)
Kuehn & Nagel (Vietnam)
Kuehn & Nagel (Kazakhstan)
Egyptian Multimodal Transport Company (Alexandria, Egypt)
Freight In Time Limited (Dar es Salaam, Tanzania)
DHL Danzas Freight Forwarding (San Francisco, CA)
Expeditors International, Route Development Manager, (Miami, FL)
Panalpina (Los Angeles, CA)
Menlo Worldwide Forwarding (San Francisco, CA)
Menlo Worldwide Forwarding (Rotterdam, Netherlands)
Menlo Worldwide Forwarding (Singapore)
Airborne Express (Los Angeles, CA)

Air Freight Rates:

TACT rates can be from a purchased CD-ROM provided by IATA (see www.iata.org and http://iata.org/tact/index). CD-ROM contains updated airfreight rates, without forwarders markup, airport storage rates and details about cargo operations at every airport around the world.

Ocean Freight Rates:

See internet sites of Ocean carriers. These sites have rate search engines that allow you to type in Origin, destination, commodity and container size and type. Based on these parameters it will output an itemized Ocean freight quote. Some only includes published rates for certain origin/destinations and generally only for the commodity class "freight all kinds, FAK. This is a basket category covering thousand of products. Generally there are commodity specific rates that are lower than the FAK rates. For an example of this rate engine see http://www.maersksealand.com and click on the "rates" link on the bottom. The Maersk site is also provides some inland transport prices. Also see www.freightquote.com.

Specific Port Information:

1. Indian Port Authority http://www.jnport.com/
2. Korean Port Authority http://www.pect.co.kr/tariff.html
3. Namibian Port Authority www.namport.com
4. Philippines Port Authority www.ppa.com.ph
5. Port of Los Angeles http://www.portoflosangeles.org/
6. Port Said, United Arab Emirates www.portzayed.gov.ae

Other Primary Sources:

1. US Dept of Commerce, Census Bureau, Foreign Trade Statistics
2. Council of Logistics Management
3. International Federation of Freight Forwarders (FIATA) Zurich, Switzerland
4. Federal Maritime Commission, Washington, DC
5. International Logistics department of major retail firm

General Information:

World Bank: www.worldbank.org
UN Conference on Trade and Development (UNCTAD): www.unctad.org

World Trade Organization (WTO): www.wto.org

Appendix 2: Sample Freight Quote Questionnaire

Dear Sir:

I have been asked to gather rate quotes for shipping goods from three locations to Hanoi for the US Agency for International Development. I would appreciate your assistance in giving me costs for these shipments.

I will be shipping these items from three different locations: New York, USA from the port of Newark, Amsterdam, the Netherlands via the port of Rotterdam and from Singapore. These rates will be for 1 standard 40 ft container. For the chilled mixed fruit I will require a refer container.

These rates will be from the origin ports to the Port of Hanoi. The payment terms are DDU (Hanoi). Please include a list of all charges and fees. The fees should include all forwarding and clearance fees, documentation charges, insurance, freight and any other additional fees. Can you also include local port storage fees per day.

The goods will be available to ship 6 July 2003. The details of the shipments are below:

Quote 1: Textile/Apparel - (T-shirts)

Pick-up location	New York (Port of Newark)	Singapore (Port of Singapore)	Rotterdam (Port of Rotterdam)
Delivery Location	Hanoi	Hanoi	Hanoi
Mode:	Ocean	Ocean	Ocean
Payment Terms:	DDU (Hanoi)	DDU (Hanoi)	DDU (Hanoi)
Commodity Information	Textile/Apparel - (T-shirts)	Textile/Apparel - (T-shirts)	Textile/Apparel - (T-shirts)
Total Net	10,560 lbs	10,560 lbs	10,560 lbs
Total Gross	10,800 lbs	10,800 lbs	10,800 lbs
Equipment	1 x 40' Standard Container	1 x 40' Standard Container	1 x 40' Standard Container
Value Goods	$25,000.00 USD	$25,000.00 USD	$25,000.00 USD

Quote 2: Chilled Mixed Fruit

Pick-up location	New York (Port of Newark)	Singapore (Port of Singapore)	Rotterdam (Port of Rotterdam)
Delivery Location	Hanoi	Hanoi	Hanoi
Mode:	Ocean	Ocean	Ocean
Payment Terms:	DDU (Hanoi)	DDU (Hanoi)	DDU (Hanoi)
Commodity Information	Chilled Mixed Fruit	Chilled Mixed Fruit	Chilled Mixed Fruit

Total Net	30,600 lbs	30,600 lbs	30,600 lbs
Total Gross	32,400 lbs	32,400 lbs	32,400 lbs
Equipment	1 x 40' Standard Refer Container	1 x 40' Standard Refer Container	1 x 40' Standard Refer Container
Value Goods	$35,000.00 USD	$35,000.00 USD	$35,000.00 USD

Quote 3: Household Goods (F.A.K.)

Pick-up location	New York (Port of Newark)	Singapore (Port of Singapore)	Rotterdam (Port of Rotterdam)
Delivery Location	Hanoi	Hanoi	Hanoi
Mode:	Ocean	Ocean	Ocean
Payment Terms:	DDU (Hanoi)	DDU (Hanoi)	DDU (Hanoi)
Commodity Information	Household Goods (F.A.K.)	Household Goods (F.A.K.)	Household Goods (F.A.K.)
Total Net	30,000 lbs	30,000 lbs	30,000 lbs
Total Gross	31,200 lbs	31,200 lbs	31,200 lbs
Equipment	1 x 40' Standard Container	1 x 40' Standard Container	1 x 40' Standard Container
Value Goods	$20,000.00 USD	$20,000.00 USD	$20,000.00 USD

Quote 4: Telecommunication Components

Pick-up location	New York (Port of Newark)	Singapore (Port of Singapore)	Rotterdam (Port of Rotterdam)
Delivery Location	Hanoi	Hanoi	Hanoi
Mode:	Ocean	Ocean	Ocean
Payment Terms:	DDU (Hanoi)	DDU (Hanoi)	DDU (Hanoi)
Commodity Information	Telecommunication Components	Household Goods (F.A.K.)	Household Goods (F.A.K.)
Total Net	40,000 lbs	40,000 lbs	40,000 lbs
Total Gross	41,600 lbs	41,600 lbs	41,600 lbs
Equipment	1 x 40' Standard Container	1 x 40' Standard Container	1 x 40' Standard Container
Value Goods	$100,000.00 USD	$100,000.00 USD	$100,000.00 USD

I appreciate your timely assistance in this matter. Please email or fax any questions and the results to me,

Thank you for your assistance and I look forward to hearing from you this week.

Best Regards,

Lor Melvin
Logistics Specialist

Appendix 3: Specific Commitments in Maritime Transport Services

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Antigua* and Barbuda	Freight: None except (3) MA&NT: reference to Merchant Shipping Act. No commitment on passenger	No commitments	No commitments	Maintenance and repair of vessels: (3), reference to Business Act
Aruba*	None except (3) NT: vessels registered in Aruba must fly Netherlands flag, must be owned by an Aruban company and captain must be Dutch national	Commitments on cargo handling, storage and warehousing, freight agency and freight forwarding	No commitments	
Australia	None except (1a) MA: requirement of representative agent who is a resident; NT, Trade Practices Commission can examine restrictive practices; (3a) establishment of companies operating a fleet under Australian flag nationality requirements for ownership and registration of vessels	Commitments on storage and warehousing services; and maritime freight forwarding services; pre-shipment inspection	No commitments	International rental of vessels with crew

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Benin*	None except on freight transportation (1) MA: access to only 20%	None except often (3) MA: state monopoly, NT: unbound	No commitments	Rental of vessels with crew
Canada	Unbound	None except Customs clearance (1)-(4) MA: Requirement for a commercial presence/permanent residency	No measures shall be applied which deny reasonable and non-discriminatory access	
Cuba*	None except on freight transportation MA (3a): foreigners cannot register ships under Cuban flag	Commitments on (partially covered) cargo handling, and storage and warehousing	No commitments	Maintenance and repair of vessels
Egypt*	None except (1) unbound, and (3) only through joint ventures with max. equity of 49 per cent	No commitments	Commitments only on port dredging but (1) unbound and (3) through joint ventures with max. equity of 75 per cent	
European Community	No commitments	Storage and warehouse services (other than in ports); freight transport agency/freight forwarding services; pre-shipment inspection	No commitments	Rental of vessels with crew (F: prior notification requirement; D: unbound)
Finland	No commitments	Storage and warehousing services; freight transport agency; other supporting and auxiliary transport services	No commitments	Charter services: leasing of vessels with crew; sea and road

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Gambia*	None No commitments on freight	No commitments	Commitments on towing and pushing and supporting services for maritime transport	Maintenance and repair of vessels
Ghana	None except (1) access to only 20 % of bulk and liner cargo, and (3a) unbound	Commitments on cargo handling, storage and warehousing, container station and depot, with a limitation on (3) state monopoly - privatisation envisaged in 5-7 years	Made available on reasonable and non-discriminatory terms	
Hong Kong	Freight none except (1-2) NT: unbound, and (3) NT: income tax exemption for operation of national flag ships No commitments on passenger	None except (1) unbound, and (2) NT: unbound. No commitments on freight forwarding	Made available on reasonable and non-discriminatory terms	Maintenance and repair of vessels; rental of vessels with crew
Hungary	No commitments	Commitments on storage and warehousing	Commitments not technically feasible	Maintenance and repair of vessels
Iceland*	None except (3a) MA&NT: Unbound for establishment of companies operating a fleet under Icelandic flag	None	Made available on reasonable and non-discriminatory terms	Additional commitments on multimodal
Indonesia	None except (1) NT: requirement to appoint local agent, (1b) "Government's cargo" and (3) MA: "may establish owner's representative" and NT: horizontal	No commitments	Access to and use of facilities	

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Jamaica*	Freight: none except (3) MA: registration and licensing requirement No commitments on passenger	No commitments	No commitments	
Japan	Unbound	Commitments on storage and warehousing (excluding petroleum products), and customs clearance.	Made available on reasonable and non-discriminatory terms. Commitments on pushing and towing services; salvaging services; watering services; fuelling services; garbage collecting services.	
Korea RP	None except (1b) MA: Cargo preference for coal, iron ore and liquefied gas (3a) Unbound for establishment of companies operating a fleet under Korean flag	None except storage and warehousing excludes agriculture, fish and livestock products. Agency, freight forwarding, and brokerage require incorporation as a joint stock company (Includes commitments on shipping brokerage)	Made available on reasonable and non-discriminatory terms	Maintenance and repair of vessels
Malaysia	None except (3) MA: only through rep. office, or joint venture with max. equity of 30%, and (3a) nationality and ownership requirements for vessels registration in Malaysia	Commitments on agency services with (3) MA: only through rep. office, or joint venture with max. equity of 30%	Made available on reasonable and non-discriminatory terms	Vessel salvage and refloating services with (3) MA: only through rep. office, or joint venture with max. equity of 30%
Malta	None except (3) MA: horizontal	No commitments	No commitments	

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Myanmar	No commitments	No commitments	No commitments	Tourist transport operation: operating a tourist business by water craft: (3) NT: unbound
Netherlands Antilles*	None except (3) NT: vessels registered in N.A. must fly Netherlands flag, must be owned by an N.A. company and captain must be Dutch national	Commitments on cargo handling, storage and warehousing, freight agency and freight forwarding	No commitments	
New Zealand	None except (3a) MA&NT: unbound for establishment of companies operating a fleet under New Zealand flag	Storage and warehousing services; and maritime freight forwarding services	No commitments	
Nigeria	None except (1) unbound with cargo reservations (40% of liner cargo, 50% of bulk trade, 100% of government cargo, 50% of aid generated cargo)	No commitments	No commitments	Maintenance and repair of vessels, (2) NT: authorization required; rental of vessels with crew (1,3,4) unbound, (2) none
Norway	None except (3a) MA&NT: ownership requirements for nationally registered ships	None	Made available on reasonable and non-discriminatory terms	Additional commitments on multimodal
Papua New* Guinea	None	No commitments	No commitments	

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Peru*	Commitments on passenger transportation by ferries exclusively for internal tourist services and (1,3) MA: authorization required, (1) NT: unbound, (2) MA&NT: unbound	No commitments	No commitments	
Philippines*	None except government owned cargoes to be shipped on board Philippines flag vessels. No limitation on (4) except time-limit for specialized vessels	None, but no commitments on customs clearance and maritime agency services	No commitments	Maintenance and repair of vessels but (2) MA: requirement to use domestic ship repair yards
St. Kitts and Nevis	Commitments on ship registration	No commitments	No commitments	
St. Lucia	None	Commitments only on trans-shipment services and free zone operations	No commitments	
St. Vincent and the Grenadines	None except (3) MA: subject to Exchange Control Act, Commercial Code and NT: withholding tax	Commitments only on trans-shipment services and free zone operations with (3) MA: subject to Exchange Control Act, Commercial Code and NT: withholding tax	No commitments	
Senegal	No commitments	Commitments on consignment, handling, forwarding and shiphandling with (1) MA: unbound	No commitments	

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Sierra Leone*	None except (3) MA: compliance required with national laws for establishing business	Full commitments on MTN.GNS/W/120 list with (3) MA: joint venture requirement	Full commitments on supporting services for maritime transport	
Singapore	Freight: None No commitments on passenger	Commitments on shipping agency and brokerage	Made available on reasonable and non-discriminatory terms	
Slovenia	No commitments	Commitments on storage and warehousing, customs clearance, freight forwarding and pre-shipment inspection	No commitments	Maintenance and repair of vessels
Thailand	None except freight: (1) restrictions on traffic with China and Vietnam, (3a) unbound, (3b) MA: horizontal, NT: income tax exemptions for national flag vessel operators	Commitments on storage and warehousing, freight forwarding (and maritime surveys and classification services) with (1) unbound, (3) MA: horizontal, NT: no limitations as long as foreign equity not more than 49%	Made available on reasonable and non-discriminatory terms Commitments on international towing, shore reception facilities (collection of waste), and port captain's services	
Trinidad and Tobago	No commitments	No commitments	Commitments on navigation aids, and communication /meteorological services	Commitments on ship surveys and repairs/building with (1,2) unbound
Turkey	None except (1) NT: discriminatory port charges; (1b) 10% preference margins for public cargoes; (3a) MA: ownership requirements	No commitments	No commitments	Maintenance and repair of vessels; rental of vessels with crew: (1-2) NT limitations

MEMBER	INTERNATIONAL SHIPPING	AUXILIARY SERVICES	PORT SERVICES	OTHER
Venezuela*	Freight: none, except (1) unbound. No commitments on passenger	Commitments on cargo handling and storage and warehousing	No commitments	

Appendix 4: Analytical Tables of Commitments

Table 1

Summary of Specific Commitments – Road Transport Services

Countries	11.F.[a]	11.F.[b]	11.F.[c]	11.F.[d]	11.F.[e]	Total
Australia	X	X				2
Austria				X		1
Brazil		X				1
Bulgaria				X		1
Canada	X	X	X	X		4
Côte d'Ivoire	X	X		X		3
Czech Republic				X		1
Ecuador	X	X	X			3
European Community	X	X	X	X		4
Finland	X	X	X	X		4
Gambia	X	X	X	X	X	5
Guinea	X	X		X		3
Guyana	X	X			X	3
Honduras	X					1
Hungary				X		1
Iceland	X	X	X	X	X	5
Jamaica	X					1
Japan		X		X		2
Kenya	X	X	X	X	X	5
Korea RP		X				1
Lesotho	X	X		X		3
Liechtenstein	X		X	X		3
Mexico	X			X		2
Morocco	X	X				2
Myanmar	X					1
New Zealand	X	X	X			3
Norway	X	X			X	3
Philippines	X	X		X		3
Romania	X	X				2
Slovak Republic				X		1
Slovenia				X		1
South Africa	X	X		X		3
Sweden	X	X		X		3
Switzerland	X		X	X		3
Thailand		X	X			2
Turkey	X	X				2
USA	X	X		X		3
Total	27	25	11	23	5	91

Appendix 5: Leading exporters and importers of transportation services, 2001

(Billions dollars and percentage)

	Value	Share in world exports/imports		Annual percentage change			
	2001	1990	2001	1990-01	1999	2000	2001
Exporters							
United States	46.1	16.7	13.5	2	2	9	-10
Japan	24.0	7.9	7.0	3	8	12	-6
Germany	20.0	6.6	5.9	3	-2	-1	0
Netherlands	19.6	5.8	5.8	4	1	-7	-1
France	18.1	7.3	5.3	1	-4	-1	-7
United Kingdom	17.6	6.1	5.2	2	-2	1	-8
Denmark	16.1	1.8	4.7	13	51	29	13
Hong Kong, China	14.4	3.1	4.2	7	2	14	2
Korea, Republic of	13.5	1.4	4.0	14	12	19	-1
Norw ay	10.7	3.8	3.1	2	-1	15	12
Belgium-Luxembourg	9.9	3.3	2.9	3	2	6	-7
Spain	8.3	2.1	2.4	5	2	5	6
Italy	8.2	4.6	2.4	-2	-11	-2	-12
Greece	8.2		2.4				3
Canada	6.8	1.9	2.0	4	6	15	-10
	.			.			
Above 15	240.0	72.6	70.8	4	5	8	-3
Importers							
United States	61.7	13.6	15.4	5	10	18	-6
Japan	32.4	10.2	8.1	2	8	15	-8
Germany	24.5	6.6	6.1	3	-1	2	-3
Netherlands	22.8	5.7	5.7	4	0	5	-6
France	17.4	6.7	4.3	0	-4	2	-11
United Kingdom	14.0	4.2	3.5	2	2	-3	-4
Denmark	12.3	1.5	3.1	11	23	29	10
Hong Kong, China	11.9	4.2	3.0	1	0	-4	-9
Korea, Republic of	11.3	1.2	2.8	12	17	32	9
Norway	10.7	1.5	2.7	9	11	9	-1
Belgium-Luxembourg	9.2	2.2	2.3	4	4	14	-3
Spain	8.2	1.8	2.0	5	8	6	0
Italy	8.1	2.3	2.0	3	-1	13	-3
Greece	7.2	1.3	1.8	7	-2	15	-10
Canada	7.0	1.4	1.7	6	8	27	-13
							.
Above 15	260.0	64.6	64.7	4	5	11	-5

Source: World Trade Organization, International Trade Statistics 2002

Appendix 6: Sample Ocean Freight Quotes, June 2003

Origin	Destination	Commodity	Equipment	
			40' Dry Container	40' Reefer container
Santa Cruz, Bolivia	New York, NY	FAK freight all kinds	4775	
Guatemala City, Guatemala	New York, NY	FAK freight all kinds	4019	
Dar es Salaam, Tanzania	New York, NY	FAK freight all kinds	4705	
Hanoi, Vietnam	New York, NY	FAK freight all kinds	7941	
Manila, Philippines	New York, NY	FAK freight all kinds	7603	
Alexandria Egypt	New York, NY	FAK freight all kinds	2537	
Dakar, Senegal	New York, NY	FAK freight all kinds	5794	
Manila, Philippines	Singapore	FAK freight all kinds	1023	
Dakar, Senegal	Singapore	FAK freight all kinds	3016	
Colombo, Sri Lanka	New York, NY	FAK freight all kinds	7019	8071
Colombo, Sri Lanka	Rotterdam	FAK freight all kinds	2144	3371
Aqaba, Jordan	Rotterdam	FAK freight all kinds	1459	4706
Ho Chi Minh City, Vietnam	Rotterdam	FAK freight all kinds	3723	4970
Manila, Philippines	Rotterdam	FAK freight all kinds	3873	5161
New York, NY	Santa Cruz, Bolivia	FAK freight all kinds	7230	
New York, NY	Guatemala City, Guatemala	FAK freight all kinds	3784	
New York, NY	Dar es Salaam, Tanzania	FAK freight all kinds	5030	
New York, NY	Manila, Philippines	FAK freight all kinds	5223	
New York, NY	Hanoi, Vietnam	FAK freight all kinds	5605	
New York, NY	Alexandria Egypt	FAK freight all kinds	11400	
New York, NY	Dakar, Senegal	FAK freight all kinds	5940	
New York, NY	Guatemala City	Textile/apparel	3700	
Singapore	Guatemala City	Textile/apparel	4540	
Rotterdam	Guatemala City	Textile/apparel	3445	
Singapore	Guatemala City	Chilled Fruit		4140
Rotterdam	Guatemala City	Chilled Fruit		4145
New York, NY	Guatemala City	FAK freight all kinds	3885	
Singapore	Guatemala City	FAK freight all kinds	4540	
Rotterdam	Guatemala City	FAK freight all kinds	3445	
New York, NY	Guatemala City	Telecom Components	3160	
Singapore	Guatemala City	Telecom Components	4540	
Rotterdam	Guatemala City	Telecom Components	3445	
New York, NY	Astana, Kazakhstan	Textile/apparel	5600	
Singapore	Astana, Kazakhstan	Textile/apparel	6000	
Rotterdam	Astana, Kazakhstan	Textile/apparel	5150	
New York, NY	Astana, Kazakhstan	Chilled Fruit	15700	15700
Singapore	Astana, Kazakhstan	Chilled Fruit	16500	16500
Rotterdam	Astana, Kazakhstan	Chilled Fruit	14500	14500
New York, NY	Astana, Kazakhstan	FAK freight all kinds	6100	
Singapore	Astana, Kazakhstan	FAK freight all kinds	6400	
Rotterdam	Astana, Kazakhstan	FAK freight all kinds	4650	
New York, NY	Astana, Kazakhstan	Telecom Components	6100	
Singapore	Astana, Kazakhstan	Telecom Components	6500	
Rotterdam	Astana, Kazakhstan	Telecom Components	5650	

Appendix 7: Supplemental Issue Checklist

Source: World Bank, 1993, "*Trade and Transport Logistics Facilitation Guidelines*" by Carlos F. de Castro. Working Paper No. 4.

Topic	**Potential Problem Areas**	**Suggested Action**
Shipping	Capacity issues: unbalanced traffic, equipment availability, limited schedules, conference manipulation of capacity and price.	- Computerized allocation of capacity . - Privatized shipping councils. - Attract multiple carriers.
	? Delays ? Cost	
Modal and Intermodal Logistics ? Port Interface3	? Late arrival of "shipping Manifest" to destination port.	- Deposit and fax of manifest at/from embassies/consulates at country of origin to ship agents and/or consular agents at destination.
	? Late arrival of cargo and manifest data to comply with US 72 hour rule.	- Use of EDI.
	? Lack of local counterpart funds to cover L/C bank charges on imports.	- Central Bank financial facility for importers. - Privately-owned and managed inland container depots for container long-term storage.
	? Port congestion with freight awaiting clearance (Customs).	- Input of "shipping manifests at customs 24 hours after ship arrival. - Pre-clearance procedures. - Review port rates and infrastructure.
	? Multiple handling and transport operations at port.	- Review freight forwarder tariffs and rationale for multiple handling
Modal and Intermodal logistics ? Land transfers		
	? Multiple handling and excessive costs at transfer points	- Review freight forwarding rates, scope

Topic	Potential Problem Areas	Suggested Action
		of operations and equipment levels. - Review Intermodal regulations for freight transport. - Review liability levels for freight in transit.
	? Pilferage and loss at transfer points.	- Review loading and unloading practices on truck, rail and ships. - Review transit document accuracy, contents and writing - Move to have electronic transfer of transit document data. - Review insurance levels - Review transit management practices of carrier.
Infrastructure facilities	? Lack of capacity for storage	- Review parastatal and private freight forwarding storage rates. - Review provisions for Investment. - Review feasibility for inland container depot (ICD). - Review storage rates.
		- Review management practices of parastatals
	? Inefficient use of transport facilities	- Review maintenance and responsibilities, private sector incentives and investment code provisions.
	? Inadequate maintenance facilities	
		- Review privatization prospects and user rates.
	? Ownership of facilities	
Customs	This covers administration, performance and overall influence on freight immobilization and transit time;	- Assess overall performance, means of operation and computerization levels

Topic	Potential Problem Areas	Suggested Action
	? Manual tasks and degree of electronic data processing	- Selection of electronic program suitable for the needs.
	? Customs declarations timing and amount of data and required documentation.	- Assess and develop program that meets international standards and local transport, government and intermediary needs.
	? Pre-shipment quantity and quality inspection	- Assess needs or effectiveness of a pre-shipment inspection agency.
Institutional Interference	? Impact of informal transactions and payments on freight movements	- Assess degree of corruption and obtain government support that will provide corrective action.
Banking and financial practices	? Banking regulations and procedures	- Assess needs for facilitation and make proposals
	? Foreign currency regulations	- Join dialogue on foreign currency reform
	? Exchange rate regulations	- Join dialogue on exchange rate policy reform.
	? Liquidity of imports	- Coordinate plan with Central Bank authorities to ease financial provisions.
Communications	? Power and telecommunications infrastructure	- Assess preparedness of country to receive EDI or internet based solutions specifically customs, shipping agents, freight forwarders, banks and port authorities.
	? Use of EDI or internet communication	
	? Introduction of UN/EDIFACT standards	
Policies and regulations ? Commercial ? Fiscal	? Inadequate trade procedures	- Assess regulatory procedures for compliance with ICC rules on imports and

Topic	Potential Problem Areas	Suggested Action
? Transport		exports and propose facilitation.
	? Restrictive trade regulations	- Assess cost of import/export of major commodities and work with government regulators.
	? Disincentives to transport operators to improve service capabilities and invest in equipment improvement	- Assess fiscal environment of trade and propose modifications.
	? Road Transport (domestic) - Entry limitations - Quantity restrictions - Economic regulations - Import restrictions - Safety regulations - Technical inspections - Vehicle registration - Monopoly and oligopoly practices - Liability regimes - Insurance - Access to financing	- Assess rationale, content and effect on efficiency; propose modifications
	? Road Transport (International/regional) - Fiscal regulations - Registrations - Quantity and entry restrictions (bilateral agreements)	- Assess rationale, content and effect on efficiency; propose modifications
	? Rail Transport - Internal regulations (parastatal) - Economic regulations - Protection from other modes - Operational regulations - Procedural requirements (commercial regulations)	- Assess rationale, content and effect on efficiency; propose modifications
	? Water Transport (inland) - Internal regulations (parastatal) - Economic regulations	

Topic	Potential Problem Areas	Suggested Action
	- Protection from other modes - Operational regulations - Procedural requirements (commercial regulations) ? Intermodal including container and modal interface (transfer)	- Assess rationale, content and effect on efficiency; propose modifications
Transport intermediaries and operators: standards, criteria of qualifications and role	? Freight Forwarders - Regulatory and economic environment - Entry into profession - Standards and qualification - Liability provisions - Financial performance - Agency network coverage	- Assess current situation and propose modernization according to recognized standards – FIATA
	? Customs Brokers - Reliability - Criteria and qualifications - Regulatory environment	- Assess performance and discuss with customs; work on regulatory modernization
	? Ship Agents/port handlers and Stevedores - Economic and contractual environment - Performance	- Evaluate capabilities and service
Documents and procedures	? Compliance with UN layout key standards ? Compliance with ICC rules ? Compliance with national and international standards and practices	- Facilitation towards UN key layout forms - Implement electronic document production systems - Implement Edi or internet based collaboration systems
Insurance	? Restrictions on insurance of imports	- Eliminate restrictions and open to competitive market.

Topic	Potential Problem Areas	Suggested Action
	? Protection of national companies	