



**United Nations
Conference
on Trade and
Development**

Distr.
GENERAL

TD/B/COM.1/AHM.1/2
7 July 2006

ENGLISH ONLY

TRADE AND DEVELOPMENT BOARD
Commission on Trade in Goods and Services, and Commodities
Ad Hoc Expert Meeting on Logistics Services
Geneva, 13 July 2006

**TRADE AND DEVELOPMENT ASPECTS OF LOGISTICS
SERVICES**

Note by the UNCTAD secretariat¹

EXECUTIVE SUMMARY

International logistics services contribute to enhancing the competitiveness of both production processes and exports delivery. Improved transport and logistics services can initiate a virtuous cycle, leading to increased trade, which in turn encourages investment in better transport and other logistics services. Logistic services are important for all businesses as a means to get their products and services to consumers and constitute a crucial element for countries' participation in globalized markets. Thus, ensuring the development of the logistics services sector in developing countries and the competitiveness of their exports in this area are a precondition to increased participation in world trade. Opening up markets to foreign service suppliers is one means of improving access to efficient logistics services and overcoming domestic constraints. However, developing countries may also wish to assess the extent to which they want to support the development of domestic service suppliers of logistics services. In current WTO negotiations to liberalize services trade, WTO Members, particularly developing and least developed ones, need to achieve liberalization, commensurate with their individual levels of development. WTO Members may wish to strive towards WTO commitments that bring them closer to a virtuous cycle of improved logistics services and increased trade, thereby promoting the development of developing countries.

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I. INTRODUCTION

1. Logistics services are central for achieving development. International logistics services contribute to enhancing the competitiveness of both production processes and exports delivery. Improved transport and logistics services can initiate a virtuous cycle, leading to increased trade, which in turn encourages investment in better transport and other logistics services.²

2. Broadly speaking, logistics services can be defined as “the process of planning, implementing, managing and controlling the flow and storage of goods, services and related information from the point of origin to the point of consumption.”³ Logistic services are important for all businesses as a means to get their products and services to consumers and constitute a crucial element for countries’ participation in globalized markets. Thus, ensuring the development of the logistics services sector in developing countries and the competitiveness of their exports in this area are a precondition to increased participation in world trade. This is of particular importance as logistics services are often underdeveloped in many of developing countries, and practically non-existent in least developed countries (LDCs). These countries need to avoid marginalization in world trade and acquire efficient transport and logistics services to ensure that lack of such services does not become a serious obstacle to their integration in world trade.

3. Opening up markets to foreign service suppliers is one means of improving access to efficient logistics services and overcoming domestic constraints. However, developing countries may also wish to assess the extent to which they want to support the development of domestic service suppliers of logistics services. The development of national capacity can ensure a minimal level of access in cases where these countries' markets may not be sufficiently attractive to foreign service suppliers who require a certain scale of operations.

4. Thus, in current WTO negotiations to liberalize services trade, WTO Members, particularly developing and least developed ones, need to achieve meaningful liberalization, commensurate with their individual levels of development. WTO Members may wish to strive towards WTO commitments that bring them closer to the virtuous cycle of improved logistics services and increased trade, thereby promoting the development of developing countries. This, in turn, will require informed participation by WTO Members, based on their market access interests and their regulatory, infrastructural and institutional constraints.

5. The aim of this paper is to discuss how developing countries can harness logistics services (and trade in them) for their development objectives, including through building their supply capacity in the sector. In addition, the paper aims at identifying issues of relevance to current negotiations on logistics services under the General Agreement on Trade in Services (GATS). The paper depicts the main features of the logistics services market, describes recent trends, including some country-specific examples and provides a discussion of the development implication of trade in logistics services. It also focuses on international trade in logistics services and discusses the main drivers and major players in the market and

² UNCTAD (2003), *Development of Multimodal Transport and Logistics Services*, TD/B/COM.3/EM.20/2.

³ Definition provided by the US Coalition of Services Industries (USCSI), USCSI (2004), Statement of the Coalition of Services Industries to the US International Trade Commission. USCI considers that logistics entail transportation, planning, inventory management, but also financial services such as insurance, factoring and lending.

the barriers to trade and reviews current developments in the GATS negotiations relating to logistics services. These issues relate, *inter alia*, to the definition and classification of logistics services, negotiating proposals, existing commitments and requests and offers (initial and revised) as well as the overall progress in the negotiations. While this paper focuses mainly on the multilateral negotiations under the WTO, a number of initiatives and developments also exist at the regional level which can contribute to supporting developing countries efforts in developing their transport and logistics sectors. These initiatives will be referred to where relevant. Finally, the paper describes the benefits that can be achieved from liberalization of trade in logistics services, the preconditions for successful liberalization including regulatory reforms, as well as the concerns to be addressed in order for WTO Members to gain from trade in logistics services.

II. THE MAIN FEATURES OF THE LOGISTICS SERVICES MARKET

A. The scope of the sector

6. Logistics can be defined as the management of global supply chains. The services provided by logistics companies include: management of customs procedures, setting up of assembly and manufacturing plants; groupage;⁴ warehousing; information logistics services; and transportation with a selection of carriers and negotiation of tariffs. Some value-added services include management of warranty support programmes, return and repair as well as global logistics services.⁵ The definition of logistics services has evolved over the years as the business itself is transformed by technological advances and changes in customers needs. As will be described in greater detail in section IV, logistics services are not clearly defined in the Services Sectoral Classification List⁶ used by WTO Members in the services negotiations. Different countries have different views of the scope of the logistics sector and the key services to be liberalized.

7. Countries' export competitiveness is determined, *inter alia*, by their productive capacities as well as their ability to bring goods to foreign markets at the lowest possible cost and under conditions required by customers. To meet the requirements of today's markets, traditional transport services are often insufficient. What is often required are more efficient and complete logistics services, involving the use of information and communications technology (ICT) and multimodal transport operations which involve a single service provider assuming responsibility for the entire transport chain. Countries' ability to rapidly transport goods to their final destination will depend on the availability, quality and cost of transport *and* logistics services. Most firms need some logistics services, which they can either produce in-house or outsource as will be described shortly. Their needs will increase with their size and the growth of their activities. Logistics services are therefore a good indicator of the overall state of an economy. When an economy grows or declines the demand for logistics services closely follows these evolutions.⁷

⁴ Groupage consists of the collection of several small consignments and the formation of one large shipment thereof.

⁵ UNCTAD (1999). *Institutional and Technological Changes in Transport/Logistics Field*. UNCTAD/SDTE/EIB/3.

⁶ Services Sectoral Classification List, Note by the WTO Secretariat, MTN.GNS/W/120, 10 July 1991.

⁷ Industry Canada (2000). *Logistics and Supply Chain Management, Overview and Prospects*. Sector Competitiveness Frameworks Series.

8. It is extremely difficult to distinguish between logistics services and related services (and more importantly transport services). Indeed, transport tends to be the main component of logistics services, and its share in overall logistics cost has been increasing in recent years (as compared to the inventory component for example). Multimodal transport, in particular, is an increasingly indispensable element of customized logistics services, which link up both domestic and global production and market places through the interconnectivity of and between modes of transport. This paper will therefore not only discuss trends and developments in logistics services *per se*, but also in a key input or related sectors; it will also refer generally to the category of logistics services for the sake of simplification.

Box 1. Definitions

The difficulty of defining logistics services stems from the multiplicity of terms that can be used to refer to identical or similar activities. Among the terms most commonly used which cover services related to logistics, i.e. trade facilitation, services auxiliary to all modes of transport and freight forwarding.

- Trade facilitation is defined as "the simplification and harmonization of international trade procedures that include activities, practices and formalities related to the collection, presentation, communication and processing of data requirement for the movement goods".⁸ In brief, trade facilitation focuses on what needs to be done once formal trade barriers have come down and looks into issues such as importing and exporting regulations and customs procedures. Trade facilitation and logistics services are related in that poor trade facilitation will act as an impediment to efficient logistics services.
- 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".⁹ Again, these are part and parcel of what is generally considered the main activities of logistics service providers.
- Freight forwarding is a term that refers to the function performed by the designer of logistics services. Freight forwarders are familiar with the import rules and regulations of foreign countries, methods of shipping, and documents related to foreign trade. They assist exporters in preparing price quotations, recommending packing methods that will protect the merchandise during transit, and reserving the necessary space on a vessel, aircraft, train or truck.¹⁰

B. Recent trends in logistics services

9. The market for logistics services has undergone many transformations in recent decades as the result of changes brought about by globalization and the increasing exchange of goods and services, the progress achieved in ICT, as well as the realization by a number of firms that they stand to gain from focusing on their core business activities and outsourcing the logistical process to other specialized firms. While logistics services have always existed as a means of getting products from the producer to consumers the difference today is that the producer and consumers of these products are in different countries. This evolution has led to the international *trade in logistics services*, whereby the producers and consumers of *logistics services* are also in different countries.

⁸ UNCTAD (2001). *E-commerce and Development Report*, Geneva and New York, UNCTAD.

⁹ CARANA Corporation (2003), *op. cit.*, p. 48.

¹⁰ Definition provided by the website of the International Trade Administration (ITA) (<http://www.ita.doc.gov/>).

E-logistics

10. E-logistics can be defined as the application of logistics, electronically, to business that is conducted via the Internet.¹¹ One of the most important recent transformations affecting the logistics industry is the increasing importance of the Internet and ICTs as a business tool. On the supply side, logistics service providers now have access to increasingly sophisticated equipment and powerful software which enable them to support each function in the supply chain (including applications that allow them to link production, transport, warehousing and demand from users in real time). This also permits firms to reduce or eliminate intermediaries such as wholesalers and retailers. On the demand side, the opportunities created by the Internet have led more businesses to move toward build-to-order models and low inventories. This implies that more value is being placed on fast and accurate logistics information. Furthermore, many web-based businesses outsource their order management, warehousing, packaging and customer support function to logistics firms.¹² E-logistics also allow for more information sharing between all participants of the supply chain. This is achieved through computer applications allowing for online order management, shipment tracking, online customer services management and online preparation of import/export documents with connection to customs services.¹³

11. The logistical requirements of e-commerce are much greater than those for traditional trade. One determining factor in this regard is the fact that traditional trade is often done through large shipment of bulk consignments whereas e-commerce – especially when it comes to business to consumers (B2C) – often relies on numerous shipments of much smaller volumes. The destinations of these shipments also tend to be more dispersed. This generally leads to the need for new features in logistics and transport services which often rely on more advanced Web-based and other technologies. The new requirements of e-commerce include the need to reduce large amounts of paperwork, improve overall productivity of logistics services and optimize functions over the supply chain. This is achieved mainly through the development of computer software applications capable of supporting a variety of services over the Internet. Among the logistics functions fulfilled by the new software applications are the following: (i) order management applications; (ii) shipment tracking; (iii) equipment and vessels tracking; (iv) transportation management and planning; (v) landed cost calculation applications; (vi) online customer service management; (vii) collaborative logistics management systems; (viii) customs clearance; (ix) returns management; and (x) integrated all-in-one supply chain management. The growth of e-logistics tends to lag behind the rapid growth of e-commerce.¹⁴

12. Developing countries often face a number of challenges with respect to e-commerce; this stems in particular from lack of IT infrastructure and low Internet use, the cost of telecommunications and security issues (including with regard to online payments). This creates a particular challenge for developing e-logistics in developing countries. There are, however, opportunities for developing countries that can be exploited. As concerns access to

¹¹ Deborah L. Bayles (2002), *E-Logistics and E-fulfilment: Beyond the "Buy" Button*, paper prepared for the UNCTAD Regional High-Level Workshop, Electronic Commerce and ICT for Central America and the Caribbean, Curaçao, 25-27 June 2002.

¹² Industry Canada (2000), *op. cit.*

¹³ UNCTAD (2001). *E-logistics: Delivering the Goods in E-commerce*, in *E-Commerce and Development Report*.

¹⁴ UNCTAD (2001), *E-commerce and Development Report*, New York and Geneva.

e-logistics services, a number of developing countries' e-commerce sellers can benefit from the services offered by global logistics service providers. Given the cost of these services, only those sellers that are offering high-value merchandise can afford these global logistics services. If directly purchasing the logistics services is not an option for developing countries the possibility remains for companies to establish partnerships with firms in developed countries which already have access to or possess the required logistics technology.

Outsourcing of logistics services (or contract logistics)

13. Traditionally, logistics were considered to be an in-house activity in manufacturing and distribution industries. Firms used to respond to their logistics needs by assigning staff and resources to carry out the required logistics activities. Over time, logistics services have emerged as an industry where specialized firms offer services on a contract basis. Firms now resort more and more to outsourcing one or several functions to third-party logistics (3PL) services providers.¹⁵

14. 3PL firms specialize in integrated logistics services. They address the logistics needs of their clients by integrating transportation, warehousing, inventory control, order processing, customs brokerage and other logistics activities in a comprehensive and seamless supply chain management system. Firms in the 3PL sub-sector provide a designed set of customized logistics services, tailored to the exact needs and specifications of their clients. Their emergence and rapid growth is directly linked to the increasing trend of outsourcing supply chain management activities. Certain industries tend to have recourse to 3PL firms more than others. For example, hi-tech/electronics and consumer products industries tend to make greater use of 3PL services than the automotive, chemical and retail industries.¹⁶

Box 2. Selected examples of national trends in outsourcing of logistics services

- Argentina: The Argentinean market for logistics can be described as moderately sophisticated. It experienced rapid growth in the 1990s but witnessed slowdown as the rest of the economy following the financial crisis. Increasingly domestic firms are considering the outsourcing of logistics. Approximately 35 per cent of companies already sub-contract all or part of their logistics activities.¹⁷
- France: Logistics services represent one of the largest industrial services sectors in France. Outsourcing of logistics services has been growing steadily over the last years and has become increasingly the norm. After the appearance of 3PL providers the industry witnessed the development of 'fourth party logistics' (4PL) (i.e. subsidiary entities which provide logistics engineering to their clients). Close to 40 per cent of French companies now outsource all or part of their logistics services.¹⁸

¹⁵ Industry Canada (2000), *op. cit.*

¹⁶ Georgia Institute of Technology (2004). *Third-party Logistics, Results and Findings of the 2004 Ninth Annual Study.*

¹⁷ Eugenio Pallares, Logistics Services Overview (Argentina), STAT-USA, 2003.

¹⁸ Oliver Collette, Industry & Supply Chain Services (France), STAT-USA, 2003.

- US: The market for 3PL services grew by 18 per cent to \$77 billion in 2003. Gross revenues for one of the main segments of 3PL services (international transportation management) increased by 42 per cent to \$23.5 billion in 2003.¹⁹ It was forecasted that the number of firms that will outsource their supply chain management will have reached 75 per cent in 2005.
- Singapore: In Singapore, logistics as a whole contributed about \$7.2 billion or 8.0 per cent to the nation's gross domestic product, employing about 93,000 people. There are more than 3,000 local and foreign transport and logistics companies operating in Singapore. The growing complexity of the logistics function has led many companies in Singapore to outsource logistics services to cover even greater range of activities. As firms expand their markets beyond national boundaries, the need for more sophisticated services such as multi-modal transport and international trade rules compliance increases. The 3PL / 4PL industry in Singapore is developing rapidly and is gaining in importance.²⁰
- South Africa: In South Africa the value addition of 3PLs is still being debated. Some contend that 3PLs do not reduce overall costs since their margin is on par with the savings. Moreover, in some cases the use of 3PLs has been shown to be risky as companies became over reliant on 3PLs (e.g. cutting costs which in turn leads to undesirable results such as poor truck maintenance, lack of driver training, etc.). However, the trend towards more outsourcing will certainly occur as logistics is not a core business to many companies.²¹

15. 3PL service providers must overcome a number of barriers, including the perception of some firms that outsourcing and/or partnerships may lead to a variety of problems linked to poor communication and data sharing, lack of mutual trust, unreliable information systems and cultural incompatibilities. Additionally, outsourcing is sometimes seen as a source of confusion or overlap in the roles and responsibilities of actors in the purchasing and providing firms. Finally, some firms may consider that logistics are too strategic to be provided by a third party.²² Until recently most firms engaged in third-party logistics originated from a parent company that dealt with transportation or warehousing, and operated as a subsidiary of that company. Many of these firms were asset-based even though some were non-asset based. Increasingly, 3PLs appear to be non-asset based as they focus on the activities at the strategic level and work closely with asset-based carriers and warehouse managers.²³

¹⁹ USCSI (2004), *op. cit.*

²⁰ Industry Canada (2003), Logistics Services, Singapore.

²¹ The First State of Logistics for South Africa 2004, "The case for measurement and revitalisation of basic logistics infrastructure in our dual economy" (2005), sponsored by CSIR Centre for Logistics and Decision Support and Spornet. In a recent report (Third-Party Logistics Study, Results and Findings of the 2003 Eighth Annual Study) the survey of logistics executives in South Africa began obtaining critical information on the use of 3PL services in that part of the world. However, the limited number of usable responses (8) does not allow to draw many conclusions. More information should be available in the reports in the coming years.

²² Industry Canada (2000), *op. cit.*

²³ Regan, Amelia C. and Jiongjiong Song (2000). *An Industry in Transition: Third-party Logistics in the Information Age*. Paper prepared for the Transportation Research Board 80th Annual Meeting in Washington DC, January 2001. N.B. Contrary to asset-based firms which have their own equipment for transportation and storage, non-asset based firms arrange for transportation and storage of products by serving as intermediaries between shippers and asset-based firms.

Fourth-party Logistics (4PL)

16. Fourth-party logistics (4PL) goes one step further than 3PL and involves the integration of all companies involved in the supply chain. This guarantees that planning, steering and controlling of all logistics procedures will be done by a single service provider with a long-term strategic objective.²⁴ 4PL providers have become necessary because companies started using the services of several 3PLs, which made the selection of one firm — as lead firm — necessary to coordinate all the others.²⁵ A 4PL can be described as a “super-manager” whose job is to supervise all aspects of the supply chain of a manufacturer or distributor and to be the sole point of contact between that company and its array of logistics and information service providers. There have been some controversy around the use of the term “4PL” instead of “logistics integrator” and “lead logistics provider”; this stems from the fact that these services can be provided either by 3PLs or by consulting firms. The trend is due to the customer’s desire to have a single company or point of contact to take charge of all logistical aspects. The customer may then choose to use the services of a 3PL which may have a better knowledge of how things operate or a consulting firm which has the talent for management, organizational issues or process re-engineering.²⁶

Reverse logistics

17. A new category of logistics services is appearing, initiated by concerns for the protection of the environment and attention to sustainable development options. These new services are named reverse logistics and basically consist of all logistic activities required to collect, disassemble and process used products, product parts, and/or materials in order to ensure a sustainable/environmentally friendly recovery.²⁷ There is now a growing industry devoted to moving used packaging materials in a reverse direction in the supply chain. The costs of reverse logistics are essential as more firms will be encouraged to participate to reverse logistics if the costs are not prohibitive. Cost calculations also come into play because in some instances there are economic benefits to using returned products in the production process instead of paying high disposal costs. Though manufacturers may traditionally not have felt very responsible for their products after consumer use, today, both consumer preferences and legislation are making firms pay more attention to the consequences and environmental implications of their business.²⁸

²⁴ Ng Haw Chen (2003). *Logistics Services* (Singapore), STAT-USA.

²⁵ UNCTAD (2001), *op. cit.*

²⁶ Hoffman, Kurt C. (2000), "Just What is a 4PL Anyway?" in *Global Logistics & Supply Chain Strategies*, August.

²⁷ "What is reverse logistics", website of Reverse Logistics (RevLog), www.fbk.eur.nl/OZ/REVLOG/Introductions.htm.

²⁸ Industry Canada (2000), *op. cit.*

Table 1. Evolution of services offered by logistics service providers

Type of providers	Service offerings	Key attributes
Logistics service provider	Basic services	Focused cost reduction Niche services
Third-party logistics provider (3PL)	Value-added services	Enhanced capabilities Broader service offerings
Lead logistics provider (LLP)	Lead logistics	Project management/ contract management Single point of contact 3PL technology integration
Fourth-party logistics provider (4PL)	Advanced services	Strategic relationship Broad supply chain expertise Knowledge and information based Shared risk and reward Advanced technology capability Adaptive, flexible, and collaborative

Source: Third-Party Logistics Study, Results and Findings of the 2003 Eighth Annual Study, Georgia Institute of Technology, 2003, p. 21.

18. The above table highlights the shift from logistics services that were initially closely linked to transport and warehouse functions to services that increasingly focus on designing efficient supply chain systems and managing the work of other service suppliers. These services are often provided by consultants or non-asset based service providers who seek to improve production management and firms' overall operations (by adapting clients' production structures to clients' needs through re-engineering of the whole supply chain). These services could represent some potential for developing country providers as they are non-asset based and therefore do not necessarily require enormous investments. Service providers must, however, have a good understanding of the whole supply chain and of the functioning and constraints of the different inputs in order to adequately advise their clients.

C. Recent trends in related services

19. In analysing the trends in logistics services, it is important to also look at the trends in input or related sectors. The next few paragraphs will focus on maritime and air transport services more particularly as transport remains a key input for logistics services, including in terms of their cost. Moreover, transport services are particularly interesting as achieving liberalization of these services in the WTO negotiations remains a major challenge.

*Maritime transport and containerization*²⁹

20. Most of the trade with origins and destinations in developing countries is waterborne. An important development in this area is the containerization of cargo traffic which has increased steadily over the last twenty years. Containerized cargo shipping has allowed investments in larger and faster ships. Seaport services have recently witnessed a trend toward increased private-sector participation and greater competition within and among ports. Different ownership and operation structures have emerged with respect to port

²⁹ Growth in container traffic has led to demands for larger, faster and specialized vessels. To handle these new vessels, ports must invest in larger cranes, storage yards, improved information technology systems, and additional dredging. The transformations to accommodate these vessels often require large investments which all ports may not be able to find. In the US this had led to port concentration as the new, mega-ships make fewer calls or no calls to certain ports. (U.S. Department of Transportation, 2003).

management, provision of infrastructure, and the supply of services. Port operations are increasingly specialized and performed in dedicated terminals. The highest performances are found in the case of containers in terminals that are dedicated to one of few shipping lines, are privately run and get sufficient calls of large ships to benefit from economies of scale allowing them to be geared with the latest equipment.³⁰ Of over 2 000 ports around the world of different sizes and handling facilities, the majority of these now conform to the Landlord Port Model, where the Port Authority regulates activities and retains the property rights over the port and where commercial operations are being taken over by private operators.³¹ However, with the emergence of large global port operators, there is now a greater risk of abuse of market power — abuse that could reduce the benefits gained from port liberalization. Creating regulatory capacity and strengthening institutions is necessary for the success of port reforms.³² This has led to concentration in fewer ports that have the capacity to offer intermodal platforms. The share of world traffic that is handled by the top ten containers ports has been increasing over the last 20 years.³³

Air transport and air cargo markets

21. Air transport services, and particularly air cargo services, have also been transformed by the advent of wide-body aircrafts in the 1970s. This made large volumes of belly space available and airlines were able to accept palletized or containerized freight and start addressing the air cargo market more aggressively. As the evolution and design of aircrafts made it possible to carry more cargo in an efficient manner, dedicated cargo airlines entered this market. The size of the airfreight and express market worldwide is approximately \$75 billion, and during the 1990s this market grew at an average rate of 6 per cent per year.³⁴ Air transport has become one of the fastest-growing cargo transport modes. Many economic sectors, and particularly logistics service providers, could benefit from a deregulated air cargo market. Studies have shown that governments can implement different policies to reduce transport costs and effectively help their countries “get closer” to high demand markets.³⁵ More specifically, improvements in infrastructure and the quality of regulation and a more liberal air cargo market could significantly reduce transport costs.

D. Trade in logistics services and development

22. Taking into account these different trends in transport and other services, UNCTAD estimates growth rates of logistics services in the next few years to be about 10 to 15 per cent in Europe and 20 to 30 per cent in the United States.³⁶ Strong growth is also reported for developing countries like India. However, not all countries are at the same level in terms of their production and/or consumption of logistics services. This implies that while there may be valid reasons for promoting further development of the sector and liberalization of these services there can be no one-size-fits-all approach. Indeed, countries will face different

³⁰ Fourgeaud, Patrick, *Measuring Port Performance*, The World Bank.

³¹ World Bank site, *Ports and Logistics Overview*, http://www.worldbank.org/transport/ports_ss.htm.

³² World Bank (2004), *Global Economic Prospects: Realizing the Development Promise of the Doha Agenda*, The World Bank.

³³ World Bank site, *Ports and Logistics Overview*, op. cit.

³⁴ Micco, Alejandro and Tomás Serebrisky (2004), op. cit.

³⁵ See for example Micco, Alejandro and Tomás Serebrisky (2004), *Infrastructure, Competition Regimes and Air Transport Costs: Cross Country Evidence*, Inter-American Development Bank, Working Paper # 510.

³⁶ UNCTAD, *Institutional and Technological Changes in Transport/Logistics Field*, Report by the UNCTAD secretariat, UNCTAD/SDTE/TIB/3, 4 March 1999, paragraph 9.

challenges and opportunities. Developing countries' and LDCs' special situation is particularly important given the important contribution that logistics services can make towards the integration of these countries in world trade. But their financial, institutional and capacity constraints must also be taken into account.

23. Developing countries' participation in the use and provision of multimodal transport and logistics services varies widely. Most developing countries are importers of transport services. Among the less advanced countries, some do not have companies that provide such services nor do they have access to services by international providers, who do not always wish to offer services in these markets. In the vast majority of developing countries, existing infrastructure, technologies, and the institutional and legal frameworks are inadequate and do not allow for efficient linkages with global operators. Connection to global transport and logistics networks should be a priority objective for developing countries in the years to come in order for their participation in global trade and production not to be further jeopardized.

24. Developing countries pay twice as much as developed countries in terms of international transport costs. This affects the costs of logistics and as a result the percentage of total logistics costs in total production costs is much higher in developing countries, especially landlocked ones, than in developed countries. The introduction of efficient transport (including multi-modal transport) and logistics services would contribute to the reduction of transaction costs and thereby increase the competitiveness of firms from developing countries. The development of logistics services in developing countries must, however, also be considered from the employment side. Activities such as transport and port operations constitute a major source of employment. The introduction of more efficient services may imply a reduction in the number of persons employed (element which developing countries need to take into consideration). Moreover, this smaller number of persons may be required to provide the same level of service or need to be retrained to provide state-of-the-art services. Persons providing logistics services will have to become more and more qualified and well-trained to keep up with the technological transformations in the area.

25. Despite these challenges, and given the importance of logistics services as backbone to international trade, it is important for developing countries to assess the extent to which improved access to logistics services would enable them to participate more actively in world trade. This question should be at the heart of the current GATS negotiations in relation to logistics services and will be discussed more thoroughly in section IV. However, given that logistics services input into the production, distribution, marketing, sale and delivery of products (thereby affecting the whole universe of production and trade), it is understandable that countries would adopt a cautious approach when deciding on policies affecting this sector.

E. Initiatives relating to trade facilitation at the regional level

26. Trade facilitation, as an important corollary to liberalizing logistics services, is also being pursued in the regional context. Examples range from common rules (e.g. for transit regimes, cross border cooperation, transparency and standards) as adopted by the 25 EU Member states, to regional, sub-regional and intra-regional approaches. In Asia, the South Asian Free Trade Area (SAFTA) recalls its Members' commitments to reforms in the area of trade facilitation (including plans to integrate more closely transport systems and harmonize

standards in the region). Trade facilitation efforts are also promoted in sub-regional initiatives, such as the Bangladesh-Bhutan-India-Nepal Growth Quadrangle initiative, and in the work of the Bangladesh - India - Sri Lanka - Thailand Economic Cooperation (BIST - EC). In Africa, the Southern African Development Community (SADC) region has made significant progress in the harmonization of documentation and procedures under customs and trade facilitation through the SADC Sub-Committee on Customs Cooperation (SCCC). Moreover, SADC and the Common Market of Eastern and Southern Africa (COMESA) have for long been working closely on issues pertaining to trade facilitation (e.g. axle load and vehicle dimensions, carrier license, road transit charges, third party motor vehicle insurance - the yellow card and advance cargo information system/rail stock tracking system). Finally, Economic Partnership Agreements (EPA) negotiations between the EU and countries from Africa, the Caribbean and the Pacific, as mandated by the Cotonou Agreement, are also addressing trade facilitation.

III. INTERNATIONAL TRADE IN LOGISTICS SERVICES

27. Liberalized trade in goods and services would result in an increased demand for logistics services at the domestic and the global levels. Logistics services providers need to focus on relevant developments in the WTO negotiations to determine whether they can capitalize on opportunities offered by increased exports of goods and services. The exchange of goods and services that is brought about by increasing liberalization of international trade raises logistics challenges and puts upward pressure on costs. This is due mainly to the multiplicity of business cultures, customs procedures, foreign regulatory regimes and related compliance that must be dealt with by firms. Increased trade flows and increased complexity of these flows are offering new opportunities for logistics services providers who are positioning themselves as facilitators of international trade.³⁷

A. Main drivers in the international market

28. In 2003, the market for logistics services worldwide was valued at around US\$ 320 billion per year in support of maritime, aviation, and land transport.³⁸ In 2002, worldwide contract logistics alone were estimated at US\$ 130 billion.³⁹ The needs of companies for logistics services are similar whether they operate on the domestic or the international markets. However, firms that participate in international trade will increasingly seek out providers of logistics services that have a global reach.⁴⁰ Moreover, the push for more efficient and global logistics services may not only come from inside. Indeed, today any country that wishes to engage in international trade is to some extent forced to adjust to trade management practices of its partner countries and to the practices in the international transport industry. The success of an exporting industry in a country will depend on its ability to tie into the emerging international trade logistics service networks.⁴¹

³⁷ Industry Canada (2000), *op. cit.*

³⁸ Ng Haw Chen (2003), *op. cit.*

³⁹ Pordzick, Wolfgang (2004), Logistics Services: An Overview of the Global Market and Potential Effect of Removing Trade Impediments, Written Statement by the DHL Group.

⁴⁰ USCSI (2004), *op. cit.*

⁴¹ De Castro, Carlos T. (1993), Trade and Transport Logistics Facilitation Guidelines, The World Bank and Economic Commission for Africa Sub-Saharan Africa Transport Policy Program (SSATP) Working Paper No 4.

B. Major players in the global market

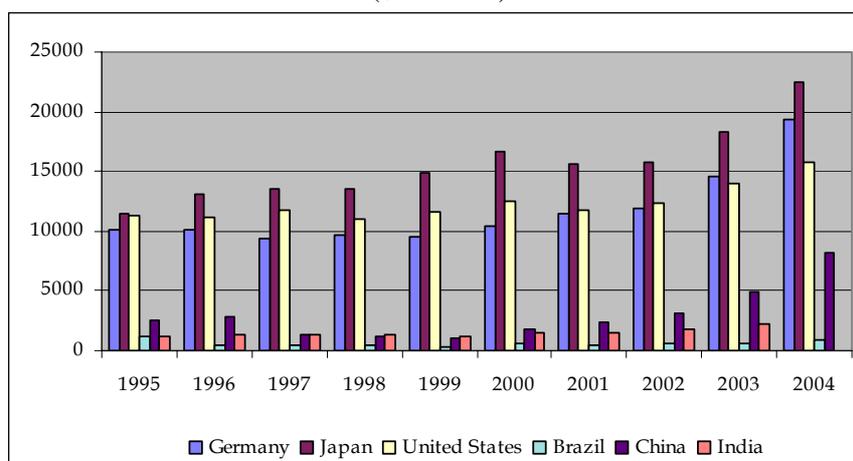
29. Though local and regional markets may be served mainly by numerous small and medium-sized firms, the internationalization of supply chains due to globalization of procurement, production and distribution requires firms that have a global presence and can offer global logistics solutions.⁴² The evolution of transport logistics in recent years has had a tremendous impact on trade in logistics services. The container has become a tool for revenue control of freight in transit from origin to destination (door-to-door). The financial liquidity offered to international multimodal transport operators by advance payments on containerized door-to-door transport contracts, has provided these operators with key financial leverage and with the possibility of subcontracting, at competitive rates, shipping, railway, and truck capacity while controlling subcontractors payment schedules (usually after services have been rendered). In some developing countries (and particularly LDCs), the shortage of know-how and network capacities on the part of the domestic freight forwarding industries, has helped to divert the financial flows associated with door-to-door freight-forwarding from domestic operators to their better organized counterparts in industrialized countries. Moreover, with the growing volumes of container trade, and with greater demand for speed and tight scheduling, it has become necessary for the water, road, and rail transport systems to be physically and operationally closely linked. Reacting to these changing requirements, key international carriers have realigned their service provisions substantially. These carriers have undergone a transformation from providers of a single transport mode to providers of integrated door-to-door services. Imaginative management, aggressive marketing, and superior service have enabled these carriers to control larger market shares, resulting in a trend towards oligopoly in many market segments.⁴³ (See Annex 1 for a table providing the list of the top twenty-five 3PL firms at the global level).

30. The above paragraphs describe the trends in logistics services when they are traded as a package (which is normally supplied by 3PLs and 4PLs). However, as was indicated previously some firms devote part of their own staff and resources to perform in-house logistics services. It is therefore useful to also look at the trends for *trade* in the main individual sub-sectors of logistics services. The case of freight transportation services will be used to illustrate the trends in trade in one of the main areas of logistics services. Transportation services are a particularly interesting example to use in this context as they are among the few services that are recorded in countries' balance of payments data.

⁴² Pordzick (2004), *op. cit.*

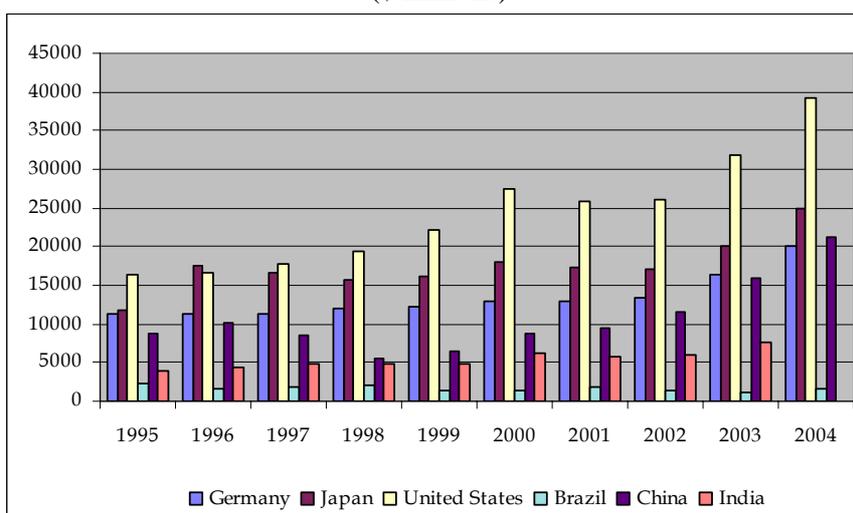
⁴³ De Castro, Carlos T. (1993), *op. cit.*

Figure 1. Freight transportation (all modes) – exports of selected countries
(\$ millions)



Source: IMF Balance of Payments Statistics on CD-ROM.

Figure 2. Freight transportation (all modes) – imports of selected countries
(\$ millions)



Source: IMF Balance of Payments Statistics on CD-ROM.

31. These two graphs highlight the fact that developed countries remain today the major importers and exporters of freight transportation services. Developing countries (even the largest among them) still lag far behind. After many years of slow growth, exports of freight transportation services seem to be increasing in developing countries and the trend appears to be particularly strong in China. As for imports of these services, there appears to have been a relative decline during the late 1990s but the trend seems to be reversing. Again, China stands out as a much bigger player than India and Brazil. In light of these preliminary conclusions, a closer look at the Chinese market would be particularly interesting, including in order to assess the extent to which their liberalization commitments under the GATS may have affected the levels of imports and exports of freight transportation services. As concerns freight forwarding for example, China's commitment was to allow for majority of joint ownership one year after accession and wholly foreign-owned subsidiaries four years after accession. Foreign companies are no longer obliged to undertake only international freight forwarding business. Given China's size and population, the potential market for logistics and

related services is huge. In 2001 already the transportation and logistics expenditures were 230 billion USD, or approximately 20 per cent of GDP.⁴⁴

Box 3. US trade in freight transportation and port services

In 2001, U.S. trade in freight transportation and port services was \$67 billion, down 6 per cent from \$72 billion in 2000. Of the \$67 billion, 56 per cent was for freight services and the remainder was for port services. The 2001 declines were in both exports (receipts) and imports (payments), mostly due to the lower volume of air traffic immediately after September 11. Despite the decline in 2001, U.S. international freight and port services trade grew between 1986 and 2001 as the volume of merchandise transported internationally increased. During this period, U.S. total trade (receipts plus payments) for these services doubled from \$33 billion to \$67 billion, growing at an average annual rate of 4.8 per cent. U.S. exports (receipts) grew at a 4.1 per cent annual rate, whereas imports (payments) grew 5.3 per cent per year, mirroring trends in goods trade. A nearly \$14 billion deficit was seen in freight services while port services showed a \$3 billion surplus, leading to an overall deficit of \$11 billion for freight and port services combined. The 2001 freight services deficit continued a trend seen since 1986 (first year for which data are available). As the amount of U.S. merchandise imports increased, so too did the payments to foreign carriers transporting many of these goods. In contrast, during the same 15-year period, the United States maintained a surplus in port services as foreign carriers that transported increasing amounts of U.S. import cargo also purchased increasing amounts of services from U.S. ports. In 2001, declines in overall freight and port services trade were experienced by all the modes, but air cargo services were affected the most. Prior to the 2001 overall declines, there had been some notable modal changes in freight and port services trade since 1986. U.S. air carriers now export the majority of U.S. freight services, having overtaken ocean carriers in 1997. Payments for airport services far exceed those for either surface or ocean modes.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics (2003), U.S. International Trade and Freight Transportation Trends, Washington, D.C.

C. Barriers to trade in logistics and related services

32. Although some firms do provide logistics services on a global basis there are a number of barriers in foreign regulatory systems that can act as barriers to international trade. When these are not pure market access and/or national treatment barriers⁴⁵ they can nonetheless have the result of increasing the costs for service suppliers, thereby possibly lowering the quality of the services provided. Limitations on how to submit documents (e.g. not possible to submit electronically) or non-transparent, costly and time-consuming licensing procedures are examples in point.

33. Barriers to trade identified by the logistics industry include the following:

⁴⁴ China's WTO Accession — Enhancing Supply Chain Efficiency: Transportation and Logistics, see www.tdctrade.com.

⁴⁵ Amongst others, the GATS addresses measures limiting market access and such limiting national treatment. As regards market access barriers, they include: limitations on the number of services suppliers, limitations on the total value of service transactions, limitations on the total number of service operations, limitations on the total number of natural persons that may be employed in a particular services sector, limitations on the participation of foreign capital or measures which restrict or require specific types of legal entity or joint venture. GATS national treatment barriers are less clearly defined. While there is non explicit list, the Agreement specifies that these are any measure which (formally or in practice) grants less favourable treatment to foreign services suppliers.

Table 2. Market access, national treatment and regulatory barriers faced by logistics service suppliers⁴⁶

Market access and national treatment barriers	Limitations on the form of establishment (e.g. requirement for partnership with domestic suppliers) Limitation on foreign equity capital
Regulatory barriers	Cumbersome, discriminatory, non-transparent, and non-uniform customs procedures Inability to submit the required document electronically Non-transparent, costly, and time-consuming licensing procedures Monopoly over the provision of certain logistics services (e.g. by government postal administration) and cross-subsidization

34. The industry also offers some solutions for addressing these barriers.⁴⁷ As concerns barriers relating to customs procedures and requirements, it is suggested that these barriers be eliminated and customs processes expedited. This could be achieved *inter alia* by:

- separating physical control (admissibility and release) from the fiscal control (duty and tax payments, statistical reporting);
- adopting realistic *de minimis* provisions allowing release of goods prior to completion of administrative requirements;
- using risk-based criteria for selecting shipments for examination, rather than random selection or inspector discretion;
- adapting hours of customs operation to the needs of the logistics industry (i.e. customs services available 24 hours/7 days a week if required);
- separating and expediting customs procedures based on the ability of operators to provide information (i.e. where operators can meet information and timing requirements of customs, they should receive expedited customs clearance);
- centralizing clearance for countries or customs unions (i.e. accomplishing clearance through the submission of information at a customs' office that is different from the point of physical entry);
- facilitating the submission and processing of information necessary for release of shipments prior to arrival of conveyances;
- elimination of all paper documents for all required information that can be transmitted electronically;
- minimizing data requirement for release, and international standardizing of required data; and
- establishing a single electronic window for filing data required by all government agencies.

35. With respect to establishment and/or equity restrictions that act as barriers to trade the US Coalition of Services Industries suggests that these be removed and indicated that trade negotiations could be used to achieve this objective.⁴⁸ As for licensing requirements, industry suggests that licenses allow the logistics provider to directly operate with carriers. It

⁴⁶ USCSI (2004), *op. cit.*

⁴⁷ Pordzick (2004), *op. cit.*

⁴⁸ To substantiate this view, the case of China's WTO commitments was put forward. It was noted that, as of 12 December 2005, the foreign ownership ceiling for international freight forwarders in China will be increased from 75 to 100 per cent.

is also noted that this is another area where facilitation can be expected following WTO negotiations. Finally, as concerns security requirements, industry suggests the harmonization and coordination of such measures between the various partners involved and between regions/countries worldwide as a means of avoiding excessive process adaptations and related costs on the part of both logistics companies and shippers. There are clearly expectations from the private sector for the WTO services negotiations to contribute to the removal of barriers to trade in logistics services.

D. Current developments in the GATS negotiations relating to logistics services

36. Trade in logistics and related services are covered by the GATS due to the agreement's broad application to any service in any sector except services supplied in the exercise of governmental authority.⁴⁹ The GATS negotiations which were initiated in 2000 and later incorporated into the Doha Work Programme therefore cover logistics services, like all other services sectors. The Guidelines and Procedures which were adopted for the negotiations on trade in services further indicate that "The negotiations shall take place within and shall respect the existing structure and principles of the GATS, including the right to specify sectors in which commitments will be undertaken and the four modes of supply. There shall be no *a priori* exclusion of any service sector or mode of supply".⁵⁰

37. Logistics services are not captured by a dedicated category under the WTO Sectoral Classification List that was developed for the Uruguay Round services negotiations.⁵¹ Despite the absence of a specific heading, elements related to logistics services can be found in the classification list under different sectors and sub-sectors, including freight transportation, cargo-handling services, storage and warehousing services, and freight transport agency services (under Transport services).⁵² Inventory management and order processing could also be considered to fall under the category Management Consulting Services under Business services.

⁴⁹ GATS Article I.3 b.

⁵⁰ Guidelines and Procedures for the Negotiations on Trade in Services, Adopted by the Special Session of the Council for Trade in Services on 28 March 2001, S/L/93.

⁵¹ Services Sectoral Classification List, Note by the WTO Secretariat, MTN.GNS.W/120.

⁵² For a further description of relevant developments in WTO negotiations on transport and logistics services, see UNCTAD (2005), Negotiations on Transport and Logistics Services: Issues to Consider, Geneva, UNCTAD.

Box 4. Core freight logistics: definitions according to UN Central Product Classification⁵³**Freight transportation services**

- CPC 72121 Transportation by seagoing vessels of frozen or refrigerated goods in specially refrigerated compartments.
- CPC 72122 Transportation by seagoing vessels of bulk liquids or gases in special tankers. These vessels may also be refrigerated.
- CPC 72123 Transportation by seagoing vessels of individual articles and packages assembled and shipped in specially constructed shipping containers designed for ease of handling in transport.
- CPC 72129 Transportation by seagoing vessels of freight not elsewhere classified.

Cargo handling services

- CPC 7411: Cargo handling services provided for freight in special containers. Included are services of freight terminal facilities, on a fee or contract basis, for all modes of transport, including stevedoring services (i.e. the loading, unloading and discharging of vessels' containerized freight, at ports).
- CPC 7419: Cargo handling services provided for non-containerized freight or for passenger baggage. Included are services of freight terminal facilities, on a fee or contract basis, for all modes of transport, including stevedoring services, and cargo handling services incidental to freight transport, not elsewhere classified. Also included are baggage handling services at airports, and at bus, rail or highway vehicle terminals.

Storage and warehousing services

- CPC 7421: Storage and warehousing services of frozen or refrigerated goods, including perishable food products
- CPC 7422: Bulk storage and warehousing services of liquids and gases
- CPC 7429: Storage and warehousing services of other goods, including: cotton, grain, wool, tobacco, other farm products, and other household goods

Transport agency services

- CPC 7480: Freight transport agency services (Freight brokerage services, freight forwarding services (primarily transport organization or arrangement services on behalf of the shipper or consignee), ship and aircraft space brokerage services, and freight consolidation and break-bulk services).

Other management consulting services

- CPC 86509 Advisory, guidance and operational assistance services concerning other matters. These services include industrial development consulting services, tourism development consulting services, etc.

⁵³ The United Nations Provisional Central Product Classification (UN CPC) is a classification of products based on the physical characteristics of goods or on the nature of the services rendered and which provides a framework for collection and international comparison of the various kinds of statistics dealing with goods and services.

38. In a background note dated 2001, the WTO Secretariat described logistics services to include general and value-added logistics. General logistics services listed included: storage, loading/unloading; striping stuffing, groupage, consolidation and distribution. Value-added logistics were listed as: repackaging, customizing, assembly, quality control, testing, repair, equipment maintenance, equipment renting and leasing, cleaning facilities, tanking, information and communication, safety and security services, offices.⁵⁴ Despite the absence of a distinct category relating to logistics services, and in addition to a number of proposals on all modes of transport, some WTO Members have proposed a checklist that would be used by Members in the current negotiations under the Doha Work Programme.

39. Several WTO Members made specific reference to logistics services in their initial negotiating proposals. The main objectives of the communications are described here.⁵⁵ It is important to note that given that logistics services are related to a number of services ranging from transport and insurance to some business services but are also sometimes considered to be part of distribution services and services ancillary to distribution, different Members may have included references to logistics in communications relating to other services sectors. The main elements of each proposal will be summarized, then all proposals will be compared in a table focusing on the elements of market access, national treatment, domestic regulations and others/classification issues. Some countries have put the emphasis on services auxiliary to all modes of transport while others have put the emphasis on key sectors such as express delivery. These differing views may also be explained by different countries' negotiating strategies with some seeking to pursue their interests in the services negotiations and others doing so in the WTO negotiations on Trade Facilitation. Within the services negotiations some Members may choose to support the idea of a logistics checklist while others may pursue liberalization commitments for each specific services sub-sector relating to logistics.

E. Proposals on logistics services

40. **Hong Kong, China** made a specific proposal with respect to the liberalization of logistics services.⁵⁶ The main objective of its communication is to propose a consolidated list of logistics and related services that could be used by Members in the negotiations in order to achieve commercially meaningful liberalization of logistics services. The services listed by Hong Kong, China include: (a) freight transportation services; (b) cargo-handling services; (c) storage and warehousing services; (d) customs clearance services; (e) transport agency services; (f) container station and depot services; (g) inventory management services; (h) order processing services; (i) production planning services; and (j) production control services.

41. Hong Kong, China calls upon Members to make substantial market access and national treatment commitments in as many of these sectors as possible. Hong Kong, China also emphasizes the importance of liberalization of maritime transport services as this will lead to further gains from logistics services.

⁵⁴ Maritime Transport Services, Background Note by the WTO Secretariat, S/CSS/W/106, 2001, p. 23.

⁵⁵ The summaries of Member's positions are not intended as a legal interpretation of the Members' positions. Readers should refer to the original WTO documents containing the submissions.

⁵⁶ Logistics and related services, Communication from Hong Kong, China, 28 March 2001 (CSS/W/68).

42. **A group of eight WTO Members** submitted a joint communication on logistics services.⁵⁷ This proposal is meant to develop further the ideas outlined in the proposals by Hong Kong, China and Switzerland⁵⁸ and provide Members with a checklist of logistics services, including core logistics services and supporting services (see details of this proposal in Box 5). On the basis of this checklist, which is to be used as a tool for the negotiations, the group suggests that Members take substantial market access and national treatment commitments. Additional commitments are also encouraged for access to markets to be provided on reasonable and non-discriminatory terms; to address licensing requirements/procedures, technical standards and anti-competitive practices; to allow service suppliers to provide the services on the checklist in combination; to allow for electronic trade administration documents and finally to ensure that procedures and formalities (e.g. for customs inspection and clearance, electronic processing) are not more burdensome than necessary.

Box 5. The logistics services checklist

The logistics checklist proposes three broad categories of logistics services. The checklist provides a definition of each category then lists its sub-categories and, where applicable, the relevant W/120 and CPC codes are provided. The checklist also includes a number of suggested additional commitments, including for: i) Members to accept electronic versions of trade administration documents, ii) suppliers are entitled to supply listed freight logistics services in combination, subject to measures necessary to prevent anti-competitive behaviour, and iii) Members to ensure that various procedures and formalities such as documentary requirements, customs clearance, customs inspection, and electronic processing, would not be unnecessarily burdensome.

I. CORE FREIGHT LOGISTICS SERVICES (Services essential to logistics operation and substantial liberalization would be required for viable logistics services)

Services auxiliary to all modes of transport (corresponding W/120 classification: 11.H)

- a. Cargo handling services
- b. Storage and warehousing services
- c. Transport agency services
- d. Other auxiliary services

II. RELATED FREIGHT LOGISTICS SERVICES

(1) Freight transport services

Maritime Transport Services (corresponding W/120 classification: 11.A)

Internal Waterways Transport Services (corresponding W/120 classification: 11.B)

Air Transport Services (corresponding W/120 classification: 11.C))

- b. Air freight transport
- c. Rental of aircraft with crew

Rail Transport Services (corresponding W/120 classification: 11.E)

- b. Freight transport

Road Transport Services (corresponding W/120 classification: 11.F)

⁵⁷ Logistics services, Communication from Australia; Hong Kong, China; Liechtenstein; Mauritius; New Zealand; Nicaragua; Switzerland and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, 25 June 2004, TN/S/W/20.

⁵⁸ See under the next section the proposal by Switzerland on multimodal transport (S/CSS/W/78).

- b. Freight transport
- c. Rental of commercial vehicles with operator and without operator

(2) Other related logistics services

Technical testing and analysis services (corresponding W/120 classification: 1.F.e)

Courier Services (corresponding W/120 classification: 2.B)

Commission Agents' Services (corresponding W/120 classification: 4.A)

Wholesale Trade Services (corresponding W/120 classification: 4.B)

Retailing Services (corresponding W/120 classification: 4.C)

Other supporting services not covered by 11. H:

III. NON-CORE FREIGHT LOGISTICS SERVICES

Computer and Related Services

Packaging Services

Management Consulting and Related Services

43. An even larger group of countries (**20 WTO Members**) submitted a joint statement agreeing in principal on the importance of taking commitments in logistics services.⁵⁹ The sponsoring countries recall the importance of the availability of efficient freight logistics infrastructure and services for global trade and improvement of global economic welfare. They therefore urge all Members to participate actively in the negotiations with a view to achieving substantial liberalization commitments in logistics services.

44. Finally, **five WTO Members** submitted a communication on their objectives for the liberalization of logistics services.⁶⁰ The co-sponsors refer back to the joint statement on liberalization of logistics services of February 2005. They also set out their basic objectives for the negotiations. Referring to the checklist of logistics services, they suggest that Members aim, when making offers, to achieve i) new or improved commitments with substantial coverage of services in Core Freight Logistics Services, ii) new or improved commitments covering different modes of transport instrumental to logistics services in Freight Transport Services, iii) new or improved commitments covering a wide range of activities in Other-related Logistics Services, and iv) as far as practicable commitments in Non-Core Freight Logistics Services as well as accompanying additional commitments in order to ensure the effectiveness of commitments in logistics services. Overall, the co-sponsors aim for both broadening and deepening of commitments in logistics services in these negotiations by a wide spectrum of Members. Finally, the co-sponsors indicated that they are considering the possibility of pursuing these negotiating objectives through multilateral and plurilateral approaches, supplementary to the bilateral request and offer approach.⁶¹ It should be noted that the co-sponsors referred to the flexibility that should be

⁵⁹ Joint Statement on the Liberalization of Logistics Services, Australia; Canada, Chile, Djibouti, the EC, Hong Kong China, Iceland, Japan, Korea, Liechtenstein, Mauritius, New Zealand, Nicaragua, Norway, Panama, Peru, Singapore, Switzerland, the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu and the US, 18 February 2005, TN/S/W/34.

⁶⁰ Objectives for Liberalization of Logistics Services, Communication from Australia; Hong Kong China, Japan, Switzerland and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, 27 October 2005, (JOB(05)/264.

⁶¹ A draft non-paper proposing benchmarks for the logistics services sectors was circulated among the "Friends of Logistics" Group. It provided for specific targets for liberalization in each of the sub-sectors listed in the logistics checklist. Furthermore, under certain sectors the benchmarks indicate a number of modes for which no

allowed for individual developing Members in taking commitments in different services sectors, taking into account their development needs and priorities. They also encouraged least developed Members to consider making liberalization commitments in services across the logistics checklist in view of the potential benefits of liberalization in logistics services to their trade and economic development.

F. Proposals on transport services⁶²

45. **The EC** in its communication relating to all transport services made specific reference to services that form part of the logistics core activities.⁶³ The communication by the EC covers their objectives with regard to the different transport sectors. For each of these sectors the EC provides some specific proposals. In addition to this, however, it suggests that a more horizontal approach be developed for some auxiliary services, in particular areas such as warehousing and freight forwarding. With respect to the air transport sector, the issues relevant to this paper that are proposed by the EC include the suggestion for WTO Members to consider taking commitments in ground administration services (i.e. supervision and administration at the airport (CPC 7461)) and freight and mail handling (i.e. physical handling of freight and mail, dealing with security and customs procedures, container handling services (CPC 74110) and other cargo handling services (CPC 74190)). As concerns maritime transport services, the EC proposes that WTO Members take commitments according to a Maritime Model Schedule (MMS). A key component of the MMS relates to services auxiliary to maritime transport, namely shipping agency activities, freight forwarding services, cargo handling, storage and warehousing, and customs clearance. The EC suggests that international maritime transport service suppliers be granted the right to undertake locally all activities which are necessary for the supply to their customers of a partially or fully integrated transport service, within which the maritime transport constitutes a substantial element. In the note annexed to the MMS the EC also provides some precise definitions for a number of services.⁶⁴

46. **Switzerland** submitted a communication dealing with services auxiliary to all modes of transport.⁶⁵ The paper underscores the importance of supply chain and logistics management for international trade. The main objective of the proposal is to suggest the elimination of all market access and national treatment barriers that suppliers of services

substantial limitations should be maintained. However, given the decision by WTO Members at the Hong Kong Ministerial Conference not to pursue with sectoral benchmarks this document was later abandoned.

⁶² Negotiations on transport services were not the most successful during the Uruguay Round. Air traffic rights and services directly related to air traffic rights were excluded from the GATS agreement while during the extended negotiations on maritime transport services Members failed to agree on a package of commitments.

⁶³ GATS 2000: Transport Services, Communication from the European Communities and their Member States, 22 December 2000, S/CSS/W/41.

⁶⁴ Maritime cargo handling services are described as those activities exercised by stevedore companies, including terminal operators, but not including the direct activities of dockers (i.e. the activities covered include the organisation and supervision of the loading/discharging of cargo to/from a ship; the lashing/unlashing of cargo; and the reception/delivery and safekeeping of cargoes before shipment or after discharge). Customs clearance services are described as activities consisting in carrying out on behalf of another party customs formalities concerning import, export or through transport of cargoes, whether this service is the main activity of the service provider or a usual complement of its main activity. Container station and depot services are defined as consisting in storing containers, whether in port areas or inland, with a view to their stuffing/stripping, repairing and making them available for shipments.

⁶⁵ GATS 2000: Services Auxiliary to All Modes of Transport, Communication from Switzerland, 4 May 2001, S/CSS/W/78.

auxiliary to all modes of transport are facing. In its proposal relating to air transport services **New Zealand** also calls on WTO Members to use the opportunity of the current round to achieve progress in such areas as auxiliary services (including cargo handling and storage and warehouse services) and other supporting services for air transport.⁶⁶

G. Proposals on services related to logistics

47. Several Members also submitted negotiating proposals on services which are closely related to, or involve the provision of, logistics services. In a proposal dealing with distribution services, **the US** describes logistics management as services auxiliary to distribution services.⁶⁷ The US requests that Members aim at achieving an open regime in the distribution sector. However, the US explains that this will not be sufficient if related or input services are not also liberalized. Other examples of related proposals include proposals relating to express delivery services. In its proposal aiming to achieve an open regime in the express delivery sector, **the US** proposes a definition of express delivery services which refers to a couple of services provided in connection to these services, namely customs facilitation and logistics management.⁶⁸ Logistics are also defined in the proposal as being “the process of planning, implementing, managing, and controlling the flow and storage of goods, services, and related information from the point of origin to the point of consumption.”

48. **The EC, Hong Kong, China, Japan, New Zealand, Switzerland and the US** proposed guidelines for the scheduling of commitments for postal and courier services, including express delivery services.⁶⁹ The proposal is based on the premise that the Services Sectoral Classification List leaves considerable uncertainty concerning the services classified under Courier services. The sponsoring countries suggest different ways to achieve clear scheduling of these services, including by stating that in their schedules, Members may clarify whether there is a relationship between activities scheduled under Postal and Courier Services, including Express Delivery, and those that may be listed under other categories, such as Transport Services. It is clear from the previous proposals discussed above that many Members consider express delivery services to be part of logistics management.

⁶⁶ Negotiating Proposal for Air Transport Services, Communication from New Zealand, 26 June 2001, S/CSS/W/92.

⁶⁷ Distribution Services, Communication from the United States, (S/CSS/W/22). It is interesting to note that the U.S. Trade Representative has a broad definition of logistics services that is based on three tiers of activities. The first tier includes supply chain consulting services (global network design and distribution strategies) and transport management. The second tier consists of freight transport services for air, maritime, road and rail transport. The third, and largest tier, consists of computer and related services; retail trade; courier services; commission agency services; rental of transport equipment; technical testing and analysis services; trade finance services; other telecommunication services, marine, aviation, and transport insurance services; express delivery services; maintenance and repair of transport equipment; data and message transmission services; sale, maintenance, and repair of motor vehicles; wholesale trade; packing services. This broad definition comprising all elements of the three tiers is very close to the "logistics services checklist" that is currently being suggested by a number of WTO Members.

⁶⁸ Express Delivery Services, Communication from the United States, 18 December 2000, S/CSS/W/26.

⁶⁹ Guidelines for Scheduling Commitments Concerning Postal and Courier Services, Including Express Delivery, EC; Hong Kong, China; Japan; New Zealand, Switzerland and the US, 17 February 2005, TN/S/W/30.

49. The last example that will be cited here is that of **New Zealand's** proposal relating to consulting services.⁷⁰ New Zealand considers that the current definitional coverage of consulting services does not seem to cover the full range of consulting services now available in the world marketplace. It suggests that WTO Members agree to add a broad definition of consulting services to the definitions listed under Management Consulting Services (CPC 865). Commitments made under this item could apply to consulting services in relation to any other sector or sectors. As was mentioned early on in this paper, Inventory management and order processing could also be considered to fall under the category management consulting services.

50. By drawing the links between logistics services and a number of related services WTO Members may be providing a comprehensive picture of how services are produced and exchanged today and the overlap between various services that result from the requirements of modern production and distribution processes (e.g. in packages/bundles). However, this approach, as well as the checklist proposed by some Members, may also have the *effect* of creating a 'cluster' of commitments which may be perceived as limiting Members' flexibility to take commitments only in sectors and modes of interest to them or as jeopardizing the legal certainty of their existing commitments. Without explicitly wishing to do so, Members may be tacitly accepting that in future another Member will be able to complain that a commitment in one sector is frustrated by government measures in related sectors. Moreover, the clustering of logistics and related services could create some uncertainties regarding the legal commitments of Members and lead them to question the soundness of using the Services Sectoral Classification List. Considering the broad range of proposals described above is also important as it illustrates that more countries may be in favour of liberalization of logistics services than would appear from the sponsorship of the communications explicitly relating to logistics services. They may simply not all use the same negotiating approach. Some WTO Members may feel that it is crucial to develop a specific category or checklist of logistics services in order to achieve liberalization while others may consider that the existing categories are sufficient. Moreover, developing countries may find it easier to assess the potentials benefits and challenges relating to liberalization of specific services rather than the effects of liberalization in a whole range of services.

Box 6. Members' objectives for logistics services

In the run-up to the 6th Ministerial Conference of the WTO the WTO Secretariat prepared a compilation of Members' objectives for the services negotiations. The compilation consists of an aggregate account of the aspirations and ambitions of participants in this round of negotiations. It can therefore not be considered exhaustive. However, after the conclusion of the Hong Kong Ministerial Conference and the explicit reference in the Ministerial Declaration to this list, it takes on a new significance. Members have identified individually or in groups the following objectives for negotiations relating to logistics services:

Scope of commitments (sectoral or modal)

- commitments according to the Freight Logistics Checklist proposed by some Members (TN/S/W/20)
- no substantial limitations on right to commercial establishment (mode 3) in Core freight logistics services (Part 1 of the checklist), with reference to particular modes of transport as necessary

⁷⁰ Negotiating Proposal for consulting Service, Communication from New Zealand, 6 November 2001, S/CSS/W/116.

- no substantial limitations on modes 1, 2 and 3 for a range of modes of transport instrumental to logistics services in Freight transport services (Part II(1) of the checklist)
- no substantial limitations for mode 3 and in other modes of supply, as appropriate, for a wide range of activities in Other related logistics services (Part II(2) of the checklist)
- commitments on Non-core freight logistics services, as far as practicable (Part III of the checklist).

Regulatory issues and additional commitments for negotiation

- acceptance of electronic versions of trade administration documents
- entitlement to supply listed freight logistics services (from services auxiliary to all modes of transport, freight transport, courier services and distribution services) in combination, subject to measures necessary to prevent anti-competitive behaviour
- assurance that procedures and formalities such as documentary requirements, customs clearance, customs inspection, and electronic processing are not unnecessarily burdensome.

H. Strategic considerations for further liberalization in logistics and related services sectors⁷¹

51. Certain WTO Members may choose to pursue liberalization of logistics and related services through the checklist approach while others may prefer to do so by negotiating liberalization of each sub-sector/item in the list. For example, negotiating liberalization of freight transportation services for all modes as part of the checklist approach or negotiating liberalization of freight transport under maritime transport, air transport, road transport negotiations respectively may not lead to the same results or may not require the same negotiating efforts to achieve the same outcome. Amongst others, the outcome might also depend on the amount of flexibility offered by the particular negotiating approach, an issue where different views persist. While some consider the checklist approach to offer significant flexibility in terms of choosing where and to what extent commitments will be made (and to bring the benefits of legal certainty, emanating from clear and specific commitments), others consider that, in practice, such flexibility might be limited. The negotiations pertaining to transport services are particularly telling in this regard.

Box 7. The case of express courier services

Courier and logistics are often considered to form part of the same industry. Though they differ in the goods that they transport (letters and small packages versus all sorts of products) suppliers of express courier and logistics services operate in similar fashion and use the same equipment and technology. The same companies often offer both sets of services and firms have grown into integrated logistics solution providers capable of handling everything from the sending of documents to the transportation of containers. Amid the rapid growth in ICT, some may have believed that the need for courier services had lessened because letters and documents can be sent through the Internet. This is not fully correct since there is always a need to send goods and documents. Firms that previously provided mainly courier services may have shifted more of their activities towards logistics services. This begs the question why express courier services were not included in the checklist of logistics services. This can possibly be explained by the fact that contrary to many segments of transport services for example the negotiations on postal and courier services may be relatively less contentious. Indeed, there seems

⁷¹ The Annex to this paper refers back to a number of issues that are raised in this paper (particularly this section and section V) and provides a checklist of questions to be used in the request offer process (or scanning tool) for WTO Members when formulating their requests and negotiating positions or assessing the offers tabled by their trading partners.

to be some consensus on the fact that certain postal services may need to remain in the hands of national postal authorities but that other segments (including express courier services) may be ripe for private and foreign competition.

52. During the Uruguay Round negotiations and the extended negotiations on maritime transport services (1994-96) not much was achieved in terms of binding commitments by countries. Indeed, in spite of the exclusion of one of the most sensitive sub-sectors of maritime services (i.e. cabotage) the negotiations concluded with very few commitments. Given their limited success Members decided to suspend the negotiations on maritime transport services in 1996 and to resume them with the commencement of comprehensive negotiations on services.⁷² This failure was partly due to the reluctance of the US to table an offer on maritime transport services. This decision might also have been influenced by the limitations of so-called single-sector negotiations (e.g. their more limited potential for trade-offs and exchanges across issues or sectors). Members also agreed that negotiations would resume on the basis of existing or improved offers. Among the approaches that were used during the extended negotiations and that are being discussed in this round is that of a model schedule for maritime services liberalization. The MMS is based on three pillars, namely international maritime transport, maritime auxiliary services, and access to and use of port services. There is a fourth pillar to the MMS that is still under consideration and relates to multimodal transport; though further work on the definition of this pillar may still be needed.

53. Liberalization of certain logistics services under maritime transport alone may, however, not be the ideal approach as in many instances suppliers of international transport services that involve a sea leg are interested in providing and completing multimodal door-to-door services across the whole logistics chain. In order to allow for these services to be provided by foreign service suppliers, suggestion was made that under additional commitments, the maritime model schedule provides for the possibility for ship-owners to consume land transport services, but not to provide them directly. However, this proposal could be faced with some resistance if it implies the complete liberalization of road transport services, including some activities in road haulage, rail transport or use of internal waterways. Another approach has been the discussions/proposals on multimodal proposals, based on the evolution of the industry, where door-to-door concepts increasingly determine the competitive edge. Clarification on the perceived advantages of multimodal commitments versus commitments on individual modes of transport still need to be assessed, as some WTO Members may oppose the inclusion of multimodal services into the negotiations, since this might violate cabotage rights.⁷³ In sum, negotiating commercially meaningful commitments on maritime transport has not proved to be an easy task.

54. Likewise, if one looks at the prospects of liberalizing logistics services related to air transport under the negotiations on air transport, the outlook may be relatively bleak. During the Uruguay Round it was agreed in an Annex on Air Transport Services that the agreement would not apply to measures affecting: (a) traffic rights, however granted; or (b) services directly related to the exercise of traffic rights. The Annex further states that the agreement does apply to (a) aircraft repair and maintenance services; (b) the selling and marketing of air transport services; and (c) computer reservation system (CRS) services. Given this limited explicit coverage (there is some disagreement on whether the list is exhaustive or not) air

⁷² Decision on Maritime Transport Services, Adopted by the Council for Trade in Services on 28 June 1996, S/L/24.

⁷³ WTO Secretariat (2005), Maritime Transport Services, Information Note by the Secretariat, JOB(05)/299.

transport is largely outside of the scope of the GATS and it remains to be seen what WTO Members will achieve in terms of air transport services in the current GATS negotiations. Many negotiating proposals and discussions surrounding air transport services have focused on sectors and issues whose coverage by the agreement is not universally accepted. Members are still struggling to define what services are "directly related to the exercise of traffic rights". As one negotiating proposal rightly highlighted the Annex contains a definition of "traffic rights", but not of services directly related their exercise. Given the ambiguity created by this situation some Members would like the WTO membership to classify and clarify all services related to air transport, so as to determine those that could be the subject of commitments.

55. One negotiating proposal suggests that the following ground handling services be covered by the GATS negotiations: (a) Ground Administration – supervision and administration at the airport; (b) Passenger Handling – assisting arriving, departing and transfer passengers; (c) Baggage Handling – handling baggage in the sorting area; (d) Freight and Mail Handling – physical handling of freight and mail, dealing with security and customs procedures; (e) Ramp Handling – marshalling and moving the aircraft, loading and unloading of aircraft, transport of passengers, freight, supplies; (f) Aircraft Services – cleaning the aircraft, heating and cooling, removal of snow and ice; (g) Fuel and Oil Handling – organization and provision of fuel and oil; (h) Flight Operations and Crew Administration – preparation of the flight, in-flight and post-flight assistance, crew administration; (i) Surface Transport – organization and execution of transport within airport – except to and from aircraft; and (j) Catering Services – administration, storage, preparation and delivery of bar and food supplies.⁷⁴ According to another negotiating proposal, Members should actively explore ways in which the — very limited — number and quality of commitments on air transport services could be increased. Improvements could be envisaged not only in the three areas explicitly referred to in the Annex, but also in such areas as auxiliary services (including cargo handling and storage and warehouse services), airport management services, air traffic control services, general aviation services, domestic air services and other supporting services for air transport.⁷⁵ If these proposals were accepted then some of the elements of interest to logistics service suppliers would be covered.⁷⁶ Even if WTO Members decide to retain a more limited coverage of GATS (i.e. aircraft repair and maintenance, computer reservation services (CRS), and selling and marketing of air transport) there might be some issues that may be particularly relevant to freight services. These would include questions such as: whether, in the absence of a specific reference to passengers, the CRS definition applies to various freight sites as well, such as GF-X⁷⁷ or cargo portal services; and whether commitments on selling and marketing also apply to freight transport, air postal transport, and air express transport? This example illustrates that developing countries need to assess the implications of different negotiating proposals not only in terms of the potential liberalization effects but also in function of the particular characteristics of their domestic markets and resulting overall impacts on their development.

⁷⁴ GATS 2000: Transport Services, Communication from the European Communities and their Member States, S/CSS/W/41.

⁷⁵ Negotiating Proposal for Air Transport Services, Communication from New Zealand, S/CSS/W/92.

⁷⁶ WTO Secretariat (2005), Air Transport Services, Information Note by the Secretariat, JOB(05)/300.

⁷⁷ Global Freight Exchange allows for electronic bookings (multi-carrier on-line cargo reservations) for the air cargo industry.

56. However, notwithstanding the benefits of liberalization of air transport, thin traffic densities and the associated lack of economies of scale are likely to remain a key obstacle to substantially lowering air cargo freight rates in the developing world. This would similarly be the case if liberalization leads to a situation where airlines develop hub-and-spoke networks, which may lower prices on well-connected hub routes but could actually raise freight rates on thin spoke routes. Flanking policies may be required to overcome these challenges, including universal service type policies imposed on operator in favour of remote and poor countries within continents.⁷⁸

57. Different Members are probably pushing for the liberalization of logistics and related services under several negotiating areas. Indeed, in order to ensure that certain fundamental objectives will be achieved in negotiating processes, some Members find it useful to pursue these issues through a variety of parallel avenues and to support them through diverse, but similarly targeted arguments. It can be considered that as the logistics checklist, by emphasizing the key role of various modes of transport in allowing for the delivery of products from the producer all the way to the consumer (door-to-door service) it will encourage liberalization in these related sectors (e.g. maritime transport sector). However, the comprehensive approach adopted in the checklist does not necessarily reflect the specificities and challenges of the negotiations on transport services.⁷⁹ Developing countries need to carefully assess the strategic implications of the different negotiating proposals in terms of the negotiating cost/benefit and in function of their limited negotiating capacity.

Box 8. Implementing Article IV of the GATS, the LDC Modalities and the Aid for Trade Initiative

Article IV of the GATS calls upon WTO Members to contribute to the increasing participation of developing country Members in world trade by taking negotiated specific commitments relating to: (i) the strengthening of developing countries' domestic services capacity and its efficiency and competitiveness; (ii) the improvement of their access to distribution channels and information networks; and (iii) liberalization of market access in sectors and modes of supply of export interest to them. When considering how to implement Article IV, WTO Members should give further thoughts both to how they can help to increase developing countries' participation in world trade in logistics services and to how logistics services can be used to increase these countries' participation in world trade more generally. With respect to commitments in sectors and modes of interest to developing countries, WTO Members may wish to consider the extent to which commitments in certain logistics services could contribute to developing countries' active participation in the logistics services market. In the context of implementing Article IV, Members have also discussed financial and technical cooperation designed to strengthen the capacity, efficiency and competitiveness of developing countries' domestic services sectors. This could also include measures to assist developing countries to move from traditional logistics services to integrated logistic services (including 3PL and 4PL services) or to move within a specific services sector from low to high end services (e.g. from simple storage to sophisticated warehousing, storage and inventory control systems). With developing countries' lagging behind in the provision of such new and dynamic services, there is clearly scope for assistance, including measures undertaken in the context of implementing Article IV.

⁷⁸ World Bank (2004), *op. cit.*

⁷⁹ Challenges include the potential clashes between liberalization in multimodal transport and several Members' restrictions relating to cabotage and the current limited application of the GATS to air transport services. UNCTAD (2005), *op.cit.*

In line with the LDC Modalities, WTO Members can assist LDCs in upgrading their logistics services sector, thereby facilitating LDCs' participation in international trade. Examples, along the lines of paragraph 8 of the Modalities include, programmes to promote investment in LDCs, assisting in the upgrading of LDCs' infrastructure, including through training, technology transfer, enterprise level actions and governmental cooperation programmes.

Also Aid for Trade (AfT) can offer a means for assisting LDCs and developing countries more broadly, in upgrading their logistics sector. In line with Ministers' recognition at the December 2005 Hong Kong Conference, a task force is currently working to make recommendations about the operationalization of AfT. With improvements of the logistics sector being a central precondition for increasing developing countries' participation in international trade, upgrading of the logistics sector would fall squarely within the AfT concept.

I. Members' current commitments and the request and offer process

58. A communication by Switzerland provides a good overview of what was the starting point for the current negotiations.⁸⁰ Switzerland reviewed the schedules of commitments of some 40 WTO Members⁸¹ and found that while the sub-sector of services auxiliary to all modes of transport is already very heterogeneous in itself, the few commitments made by WTO Member States are even more heterogeneous. Generally speaking, there are few commitments from countries in this sub-sector. Some two thirds of the Members considered made no commitments at all. Half of the countries that did make commitments (especially the industrialized countries and the countries in transition) did so in only half or less of the CPC categories making up the sub-sector. Switzerland considered that the commitments could therefore be at best described as only partial, especially as in some cases they are also subject to certain exceptions. Switzerland concludes that for companies working on a transnational basis, this absence or heterogeneity of commitments is a real problem.

59. At the June session of the Council for Trade in Services (CTS) a group of some 20 WTO Members⁸² circulated a room document⁸³. This document provides a statistical analysis of offers in logistics services tabled by WTO Members.⁸⁴ The note highlights that: (i) of the 61 offers that have been tabled, 41 have maintained existing commitments on logistics services; (ii) of the 20 offers which do not have existing logistics commitments, 5 have newly offered commitments on logistics services; (iii) 15 of the 61 offers offer no commitments on logistics services; and (iv) of the 41 offers that have existing commitments 22 have offered improvements to existing commitments while 19 have offered commitments on new services sectors or sub-sectors. (See also Annex 2 to this document which summarizes existing commitments, offers and revised offers on logistics services of QUAD countries.) Switzerland also made a statement on behalf of the group of 20 Members. The group of co-sponsors represents both developed and developing countries and both coastal and

⁸⁰ WTO (2001), GATS 2000: Services Auxiliary to All Modes of Transport, Communication from Switzerland, S/CSS/W/78.

⁸¹ The schedules that were reviewed by Switzerland are the following: South Africa, Argentina, Australia, Bolivia, Brazil, Bulgaria, Canada, Chile, Korea, Egypt, United States, Guatemala, Hong Kong (China), Hungary, India, Indonesia, Israel, Japan, Malaysia, Morocco, Mexico, New Zealand, Pakistan, Peru, Philippines, Poland, Slovak Republic, Czech Republic, Romania, Senegal, Singapore, Slovenia, Switzerland, Thailand, Tunisia, Turkey, the European Union and Uruguay.

⁸² The active proponents of further liberalization in logistics services are referred to as the Friends of Logistics group.

⁸³ Statistical analysis of offers in logistics services tabled by WTO Members.

⁸⁴ This document was updated at the end of August 2005 and covers 68 offers.

landlocked countries. The size and diversity of the group was stated as an indicator of the interest for logistics services. Switzerland indicated that the Friends of Logistics group will be further analyzing initial and revised offers. This analysis is important because it will indicate the extent to which WTO Members are willing to make offers on logistic services. The sponsors of the communication indicate that as logistics services cover a wide range of essential activities they are well aware that among these services some may be sensitive to certain WTO Members. They suggested that more analytical work be done in order to identify areas for convergence.

60. The negotiations on services are still ongoing so it remains to be seen just how much will concretely be achieved by the Friends of Logistics in the current round. In the run-up to the WTO Ministerial Conference held in Hong Kong, China in December 2005 there was a lot of discussion surrounding the plurilateral approaches and benchmarks for the negotiations, which was an issue of particular interest for all the "friends groups". The Ministerial Declaration provides some direction as to how the negotiations will proceed in the coming year. The text indicates that the negotiations on trade in services shall proceed to their conclusion with a view to promoting the economic growth of all trading partners and the development of developing and least developed countries. It also calls on Members to participate actively in these negotiations towards achieving a progressively higher level of liberalization of trade in services. Members also expressed their determination to intensify the negotiations in accordance with a set of objectives, approaches and timelines set out in Annex C to the Ministerial Declaration and view to expanding the sectoral and modal coverage of commitments and improving their quality.

61. Members reiterated at Hong Kong that in addition to the request-offer approach, which remains the main method of negotiation; negotiations will be pursued on a plurilateral basis. These plurilateral negotiations would be organized in the following manner: i) any Member or group of Members may present requests or collective requests to other Members in any specific sector or mode of supply, identifying their objectives for the negotiations in that sector or mode of supply and ii) Members to whom such requests have been made shall consider such requests. Finally, Annex C also provides some timelines for the services negotiations: (i) Any outstanding initial offers should be submitted as soon as possible; (ii) groups of Members presenting plurilateral requests to other Members should submit such requests by 28 February 2006 or as soon as possible thereafter, (iii) a second round of revised offers shall be submitted by 31 July 2006; and final draft schedules of commitments shall be submitted by 31 October 2006.

**Box 9. Plurilateral requests for logistics services, maritime transport services
and air transport services**

As could be expected, WTO Members have submitted plurilateral requests in all major services sectors, including logistics, maritime, postal and courier and air transport services. Plurilateral requests generally share the same format, identifying the requesting Members and stating the number of Members receiving the request (without identifying them). They also explicitly state that the requesting Members are deemed to be recipients of the request. **The collective request on logistics**

services is interesting in that it refers in several instances to other related services by indicating that different co-sponsors may not attach the same importance to services across the checklist⁸⁵ (e.g. air transport services are listed in the checklist because they can be part of supply chains but this is not intended to request for commitments in those air transport services that are currently excluded from the application of the GATS) and that the collective request on logistics services is complementary to other initiatives in pursuing liberalization commitments in individual sectors (as many services essential or related to logistics services are being addressed individually through the plurilateral process, including for example maritime transport, air transport, postal and courier including express delivery services, etc.). The request therefore focuses on core freight logistics services, freight transport services, and other related logistics services and indicates that where liberalization commitments in specific sectors under the checklist are being pursued plurilaterally elsewhere, negotiations in those sectors will be taken up in the context of those other plurilateral initiatives in order to avoid duplication of work. Otherwise, the plurilateral requests simply reiterates the sponsors desire to see substantive (new or improved) commitments in logistics services, across a broad range of services related to logistics services with reference to the checklist. However, the co-sponsors also indicated that in order to facilitate the smooth supply of logistics services separate negotiations pursue the following objectives: (i) to ensure that service suppliers will be allowed to supply freight logistics services in combination; (ii) to ensure that service suppliers will be allowed access to and use of core and related freight logistics services on reasonable and non-discriminatory terms, (iii) to ensure that various procedures and formalities such as documentary requirements, customs clearance, customs inspection, and electronic processing, would not be unnecessarily burdensome: and (iv) to ensure that electronic versions of trade administration documents will be accepted.

The plurilateral request for maritime transport services states that the MMS (annexed to the request) should be the basis for making (new or improved) commitments on maritime transport services. The requesting Members indicate for international freight transport, maritime auxiliary services, access to and use of port services, and additional commitments for the conduct of multimodal transport operations, the exact commitments (including the removal of existing limitations) that they would like to see taken by Members. **The plurilateral request for air transport services** focuses on further liberalization of aviation ground handling services as a means for boosting the competitiveness of the air transport sector. The requesting Members ask for commitments be taken with the widest possible sectoral coverage, and in particular for aircraft repair and maintenance services, selling and marketing of air transport services, computer reservation systems services and ground handling services and airport operation services.⁸⁶ Specific (new or improved) commitments for each mode of supply are requested for all the services sectors.

The key objectives of the **plurilateral request on postal and courier including express delivery services** include: issues related to the sector description (e.g. clarifications), market access and national treatment commitments (substantially unrestricted market access and effective national treatment for services carried out under competitive conditions) as well as certain additional commitments (e.g. to address unreasonable practices by dominant suppliers, issues related to independence of regulators, and transparency and reasonableness of licensing requirements). While the request recognizes the need for government intervention to ensure the universal supply of quality basic postal services, the requestors nevertheless expect Members to come forth with strong commitments for activities that are carried out under competitive conditions.

After two rounds of plurilateral negotiations, most Members find the process useful for shedding light on technical considerations (which benefited from direct interaction between capital-based experts) and on the broader picture which is emerging (e.g. what are the target countries, what are

⁸⁵ The collective request annexes the checklist in an appendix and reiterates that the checklist is to be used as a tool for assisting the making of liberalization commitments essential or related to logistics services and not as a classification or cluster proposal.

⁸⁶ Specific definitions are provided for each of the sub-sectors listed.

their bottom lines and what could be the nature of a minimum/acceptable package of commitments). For those seeking higher liberalization commitments, however, the process has, so far, failed to produce concrete outcomes and it is expected that Members will refocus on the (continuing) bilateral negotiations.

62. What remains important in this context is for countries, and particular developing countries, to have a clear understanding of the benefits to be gained from liberalization but also the preconditions for these gains and the particular challenges that they may face as developing countries when it comes to liberalizing logistics services. These elements will be described in the following section. (For Annex 2 for a summary of the main issues that WTO Members may wish to consider when developing their individual negotiating positions in the GATS negotiations.)

IV. BENEFITS, PRECONDITIONS TO SUCCESSFUL LIBERALIZATION AND CONCERNS TO BE ADDRESSED

A. Potential benefits from further liberalization

63. The development of multimodal transport and logistics is seen as a powerful tool to reduce transaction costs and thereby increase the competitiveness of firms. In this context, cost savings resulting from reduced transit times or lead times from order processing to delivery of goods are an important aspect. In a typical case, improved logistics management can lead to a significant reduction of lead time.⁸⁷ In order for developing country firms to have access to an optimal level and quality of logistics services they can either choose to import these services from abroad or support the domestic service suppliers of logistics to strengthen supply capacity and compete successfully with foreigners. Removing barriers which impede access to markets under the GATS is a means for ensuring access to efficient logistics services. Liberalization of logistics and related services increases competition in import services such as transport which, in turn, reduces costs and promotes the development of logistics providers. However, there are a number of other issues — which may constitute barriers to trade — that must be dealt with for increased liberalization to lead to the desired developmental results. These issues relate to: infrastructure and technologies; domestic regulation including flanking policies; security and safety issues. National measures but also international measures can be taken to address these issues, as will be described below. Supporting domestic service suppliers can be a particularly relevant option for countries that are either located far from economic centres or whose markets are not large enough to attract foreign service suppliers. But even where developing countries choose to promote the development of their domestic industry, they need to address a number of constraints which includes poor infrastructure, costs of IT system development, lack of qualified personnel, regulatory constraints, and government restrictions.

B. The need for adequate infrastructure, human capital and technologies

64. Inadequate infrastructure will affect all the different areas of logistics services from air, maritime, and road transport to related information services. For example, as concerns port infrastructure it appears clearly that in most countries private sector investment in

⁸⁷ UNCTAD, Report of the Expert Meeting on the Development of Multimodal Transport and Logistics Services (held 24–26 September 2003), TD/D/COM (18 November 2003). Lead time generally refers to the time interval between the placement of a contract and receipt into the supply system of materiel purchased.

common user ports will be required to supplement public investments. Increased competition and private sector participation to encourage investment in infrastructure and the introduction of new technologies. Given the importance of technology for logistics services and given the pace of technological change, firms will have to renew their capital equipment and software regularly to stay competitive. Information technology should therefore become one of the key focuses of their investment strategy, with a view to maintaining state-of-the-art technology which fully integrates the different components of the supply chain and facilitate information flows. In addition to infrastructure and technology, also human capital is important. Logistics employees are also key assets in the logistics industry's ability to adapt to changing conditions and seize new market opportunities. Logisticians are key partners in rethinking firms' supply chain strategies and ensuring success on international markets by controlling logistics costs, despite upward pressures brought about by the multiplicity of foreign regulatory regimes and other special requirements.⁸⁸ This will require that they remain informed of the evolution in the sector and ready to adapt and retrain. This also requires significant degree of human capital, with the respective investments in education and human capital formation, and, more broadly, human development.

65. The digitization of trade and transport information tends to be more advanced in developed than in developing countries. ICT require investment in hardware and software as well as capacity development. Even though costly, such investment is a precondition for transport and logistics service providers to be connected to global networks and remain competitive in today's global trading environment. Shippers or transport providers who, for example, do not have access to the Internet will also be excluded from transport and logistics networks. Private sector is probably most apt to keep up with these rapid changes and investment requirements.

66. However, the public sector maintains an important role with regard to investment in public infrastructure such as national telecommunication systems and port services. Infrastructure improvement and improved staff qualifications will, however, not be sufficient if there is no corresponding adjustments/improvement of regulations and labour regimes. To reap the maximum benefits of modern technology, a supportive legal framework is required, one which, *inter alia*, recognizes the legal effect and validity of electronic data messages and thus adequately facilitates their use. There is a risk that developing countries may be late in the introduction of new technologies, which require investment in equipment, as well as in introducing new legislation and regulations. This could lead them to 'miss the train' and have immense difficulties in regaining market access that would have been lost to foreign competitors.

C. Regulating logistics services

67. Production and trade of services are inextricably linked with domestic regulation. Indeed, it is through domestic regulations that countries put in place a number of policy objectives for the services economy and more particularly for services trade, including the development of an industry (in terms of supply capacity), a competitive environment, consumer protection and the safeguarding of non-trade concerns such as universal access, cultural diversity, and environmental protection. The regulatory rationale includes the public interest to address market failures, which can arise from information asymmetry (e.g. in

⁸⁸ Industry Canada (2000), *op. cit.*

knowledge and intermediation based services such as financial and professional services), excessive entries, natural monopolies (e.g. in network based services such as telecom and transportation) oligopolies or externalities (e.g. environmental degradation caused by transport services). More broadly, the ultimate objectives of regulation are equity, accessibility, availability, and quality/safety as well as ethical issues. These aspects relate to the daily life of citizens and touch upon the essence of effective and credible governance.

68. In the case of logistics and related services the more important objectives may be the development of the industry (given its key role in supporting other areas of economic activity) and ensuring that this development is done in a competitive environment (given the well-known anti-competitive practices that may affect transport and other services that are essential components of logistics). Depending on the objective of regulation, there are a variety of regulatory responses. These include competitive safeguards, universal service obligations, the regulation of pricing, production and delivery of services (including quality standards), transparency obligation or others.

69. The GATS agreement recognizes countries' right to regulate to meet national policy objectives, with particular emphasis on developing countries' particular right to do so. Any liberalization of logistics services therefore needs to be done in such a manner that it is accompanied by sound policies and appropriate regulatory and institutional frameworks that ensure that the reduction of regulatory barriers (with the objective of ensuring availability of quality services at the best prices) while not leading to regulatory failure with respect to the policy objectives outlined above (thereby allowing developing countries to further their economic and development objectives). This would suggest that policy intervention not focus on deregulation, but rather, on implementing a sound and balanced regulatory framework.

70. Competition issues can be particularly relevant with respect to logistics, for example in courier services, where on the one hand the monopoly on postal services allows government postal administrations to cross-subsidize services or even abuse of their monopoly power and on the other hand large private firms are increasingly dominating the market. The same holds for transport services where government policies and private practices often lead to anti-competitive situations (e.g. in maritime transport).

Box 10. Ensuring competition in courier and logistics services, the case of the European Commission (EC)

In recent years the EC has had to decide on several occasions on the impact on competition in the common market of concentration due to the purchases of shares of one logistics firm by another. Though in the few cases reviewed here⁸⁹ the final decision of the Commission was that the notified operation was compatible with the common market, these decisions nonetheless point to a series of interesting issues. Firstly, one Commission decision recognizes that there is a certain blurring of the boundaries between the different segments (for example between express parcel and express freight delivery) and the important transformation that is occurring in the service offering in the sector as well as the appearance of new and growing products which have evolved from existing services (e.g. logistics services). However, despite this trend towards product integration the Commission considered that there remained distinct product markets for the different services (in particular it

⁸⁹ Commission decision of 15/02/1999 (Case No IV/M.1405 – TNT POST GROUP / JET SERVICES), Commission decision of 11/05/1999 (Case No IV/M.1500 – TPG/TECHNOLOGISTICA), and Commission of 25/02/2002 (Case No IV/M.2722 – AUTOLOGIC/TNT/WALLENUIIS/WILHELMSSEN/CAT JV).

considered that general contract logistics are distinct from express parcel delivery services and financial management).⁹⁰ Secondly, the ability of the service providers to offer a complete range of services was considered a positive development as long as it did not provide them with a substantial competitive advantage over their competitors. Thirdly, the investigation by the Commission in one case dealing strictly with logistics service providers showed that international companies do not necessarily use the same logistics providers across the different countries where they are present (despite the presence of providers covering these different countries). This points to the importance of knowledge in localized markets and network infrastructure which favour competition.

71. As the EC example shows, countries need to have the capacity to control and maintain oversight of corporate activities, of competition issues, and the development of new markets. Market mechanisms alone may not always be sufficient to guarantee optimal outcomes for the domestic economy. From the suppliers' side, it is important that the sector is not overly regulated and particularly that different regulations at national, regional and local level do not prevent the creation of national networks for the provision of services. While today all countries recognize the benefits of devising appropriate domestic regulatory frameworks and institutions, developing countries face a bigger challenge. Particularly, this is the case as many of them do not yet have an appropriate regulatory system in place. Thus, sequencing of regulatory reforms and undertaking precautionary regulatory measures are particular concerns for developing countries. The challenge for them is to devise regulatory framework that will work well particularly in sectors such as logistics where fast changes are occurring. If that is too difficult to achieve, then perhaps the pace of liberalization should be adjusted to the supervisory and regulatory capability of the countries concerned. The discussions surrounding classification issues point to the fact that logistics services are still very much in evolution. This is probably due to the importance of the IT and consultancy components of these services, which are two areas which go through constant evolution. While this evolution is not something that may halt any time soon, countries, particularly developing countries still in the process of developing their regulatory frameworks and building domestic supply, may wish to carefully consider binding commitments under the GATS.

72. Building an efficient and secure environment for logistics services requires the existence of an appropriate and supportive legal environment. A legal framework that reflects technological developments and commercial practices and succeeds in creating certainty and predictability is vital. In contrast, an outdated, complex and fragmented legal framework creates uncertainty and increases transaction costs, as it leads to costly litigation and increased insurance costs. Cumbersome, non-transparent and non-uniform customs procedures can become a significant barrier to trade and to effective logistics services. Domestic laws are often unclear in this area. Lengthy inspection procedures and inability to submit required documents electronically are considered by the private sector as impediments to trade. Licensing procedures are also often non-transparent, time-consuming and costly.

73. However, effective logistics services will not require de-regulation but rather a supportive domestic regulatory framework. For example, regulation needs to be put in place to deal with corruption, theft and accidents. Otherwise, any losses will only result in costs to firms without any possibility of recovering their losses. No international uniform regime is in force to regulate liability for loss, damage or delay arising from multimodal transport and logistics services. Instead, the present legal framework governing multimodal transport

⁹⁰ Case COMP/M 1794 Deutsche Post/AEI of 07/02/2000.

consists of a complex array of international conventions designed to regulate unimodal carriage, diverse regional/sub-regional agreements, national laws and standard term contracts. As a consequence, both the applicable liability rules and the degree and extent of a carrier's liability vary greatly from case to case and are unpredictable. Regulatory differences will add a layer of complexity to the exchange of goods, services, and of the related information for trade⁹¹ and will make the work of the logistician even more complex. So while trade increases the market for logistics services it also makes the business more complex if it is not accompanied by some form of regulatory harmonization or convergence.

D. Security and safety issues

74. Following the September 11, 2001 events governments have had to pay much greater attention to security issues linked to trade. This can be seen as both an additional burden for logistics services suppliers and a benefit as it makes their services even more essential to customers. Measures were adopted by countries both multilaterally and unilaterally. In the area of maritime security, the multilateral initiatives include the modifications to the Safety of Life at Sea Convention (SOLAS) and the International Ship and Port Facility Security Code. Among the unilateral measures are those of the US such as the Maritime Transportation Security Act of 2002 (MTSA), the Customs-Trade Partnership Against Terrorism (C-TPAT), and the Container Security Initiative (CSI). Similar measures were adopted for rail and road transport services. These new measures have the potential of driving up trade costs and shutting out products from developing countries. Developing countries will require technical expertise, infrastructure, training and financial assistance in order to cope with the implementation of the new security measures, otherwise these measures might effectively become a new non-tariff trade barrier. The international community should seek to put in place a cost-effective and practical security system, which would be accessible to all countries. Moreover, a coordinated policy approach should be promoted with regard to security matters in order to avoid proliferation of overlapping measures.

V. CONCLUSION

75. Logistics services are required for the management of the global supply chains that have become characteristic of today's global economy. Countries' export competitiveness is not determined solely by their productive capacities but also by their ability to bring goods to foreign markets at the lowest possible cost and under conditions required by customers. Countries wishing to build or maintain the competitiveness of firms on the global market need to pay attention to several key strategic factors, including the development of efficient transport, communications and logistics infrastructure and services. Countries also need to have the capacity to control and maintain regulatory oversight of corporate activities, of competition issues, and the development of new markets.

76. Clearly, logistics services are far-reaching in scope and should, therefore, be negotiated in conjunction with other services sectors such as transport, business and communications. Although an important factor for trade facilitation, negotiations on logistics services should be seen in a broader perspective and aim to secure a balance of concessions and gains in all other areas currently negotiated in the GATS and beyond.

⁹¹ Industry Canada (2000), *op. cit.*

77. While the current proposals on logistics services and related sectors may be motivated by the desire of policy makers and negotiators to ensure that recent developments in business practices and new market realities are adequately reflected in WTO Members' schedules of specific commitments, the changes that they are suggesting may not be without consequences for developing countries. While the liberalization of logistics services may provide developing countries with access to the import of efficient services it may also lead to unanticipated impacts of their services sectors and regulatory frameworks.

78. As was discussed in some length in the previous sections, there still remains a certain degree of uncertainty regarding logistics services and whether all services sectors or activities included in the proposed checklist fall within the scope of the GATS. A key consideration for developing countries is to ensure that while actively participating in these negotiations, they retain the requisite degree of flexibility to regulate and devise strategies that meet their development objectives and trade interests, including their ability to introduce solutions that mitigate adjustment costs stemming from any new commitments. Developing countries need to pay attention to the content, pace and sequencing of reform and liberalization in logistics and related sectors. In this regard, developing countries may consider capitalizing on synergies that exist between transport and logistics services and trade facilitation negotiations, including technical assistance and capacity-building initiatives provided for in annex D of the 2004 "July Package" and the Aid for Trade initiative.

79. Developed country Members should assist in designing policies aimed at increasing the supply capacities of developing countries' operators. This could be done through such means as facilitating transfer of know-how, increasing managerial capabilities, and promotion of the use of information and communication technologies. Moreover, they should provide access to their markets for suppliers of developing countries as this will stimulate the growth and efficiency of developing countries' service providers and promote the development of logistics services.⁹²

⁹² Efficient Transport and Trade Facilitation to Improve Participation by Developing Countries in International Trade, Note by the UNCTAD Secretariat, TD/B/COM.3/72, 9 January 2006.

Annex 1**Top 25 global third-party logistics service providers (3PL), by revenue**

3PL	Logistics services provided
2003 Total Revenue <i>\$ millions</i>	
Exel plc (UK) 8,900	Warehousing and distribution (contract logistics), air and ocean freight forwarding, supply-chain consulting, customs brokerage, transportation management, returns management, home delivery.
Kuehne & Nagel International AG (Switzerland) 6,900	Ocean and air freight forwarding, value-added warehousing and distribution, transportation management, customs brokerage, supply-chain management.
Schenker (Germany) 6,400	Air and ocean freight forwarding, customs brokerage, warehousing and distribution, transportation management.
DHL Danzas Air & Ocean North America (Germany) 5,700	Air and ocean freight forwarding, customs brokerage, transportation management, warehousing and distribution, supply-chain consulting.
P&O Nedlloyd (UK & Netherlands) 4,800	Warehousing and distribution, ocean shipping, supply-chain consulting, customs brokerage, port services.
TPG/TNT (Netherlands) 4,700	Manufacturing support and subassembly, transportation management, supply-chain consulting, dedicated contract carriage, warehousing and distribution, returns management.
Panalpina (Switzerland) 4,600	Air and ocean freight forwarding, transportation management, warehousing and distribution, oil and gas services.
UPS Supply Chain Solutions (US) 4,100	Air and ocean freight forwarding, customs brokerage, transportation management, warehousing and distribution, supply-chain consulting, dedicated contract carriage, trade finance and insurance, equipment leasing, mail services.
Nippon Express (UK) 4,000	Air and ocean freight forwarding, warehousing and distribution, transportation management, supply-chain consulting, customs brokerage.
C.H. Robinson Worldwide (US) 3,600	Freight brokerage, air and ocean freight forwarding, transportation management, warehousing, print logistics.
Menlo Worldwide (US) 3,100	Transportation management, warehousing and distribution, air freight forwarding, customs brokerage, supply-chain consulting, returns management and expedited.
NYK Logistics (Japan) 3,000	Freight forwarding, customs brokerage, inter-modal transportation, value-added warehousing.
Expeditors International of Washington (US) 2,600	Air freight forwarding, customs brokerage, transportation management, warehousing and distribution, supply-chain consulting.

3PL	Logistics services provided
2003 Total Revenue <i>\$ millions</i>	
Penske Logistics (US) 2,500	Dedicated contract carriage, transportation management, supply-chain consulting, warehousing and distribution, equipment leasing.
Eagle Global Logistics (US) 2,200	Air and ocean freight forwarding, transportation management, warehousing and distribution, customs brokerage, expedited, project management.
BAX Global (US) 2,000	Air freight forwarding, transportation management, warehousing and distribution, supply-chain consulting, freight payment and auditing, customs brokerage.
Ryder (US) 1,900	Supply-chain consulting, transportation management, warehousing and distribution, dedicated contract carriage, air and ocean freight forwarding, equipment leasing, returns management, freight payment and auditing, insurance.
Schneider Logistics (US) 1,900	Transportation management, supply-chain consulting, dedicated contract carriage, freight payment and auditing.
UTi Worldwide (US) 1,200	Air and ocean freight forwarding, customs brokerage, warehousing and distribution.
Caterpillar Logistics (US) 1,000	Warehousing and distribution, transportation management, logistics consulting.
APL Logistics (Singapore) 990	Ocean and air freight forwarding, warehousing and distribution, transportation management, dedicated contract carriage, customs brokerage.
Wilson Logistics Group (Sweden) 860	Warehousing and distribution, air and ocean freight forwarding, customs brokerage, transportation management, supply-chain consulting.
FedEx Supply Chain Services (US) 603	Domestic and international transportation management, customs brokerage and freight forwarding, supply chain consulting, warehousing and distribution services.
Maersk Logistics (Denmark) 350	Ocean and air freight forwarding, warehousing and distribution, customs brokerage, supply-chain consulting.
SembCorp Logistics Ltd. (Singapore) 275	Warehousing and distribution, air and ocean shipping, supply-chain management, dangerous goods management, offshore logistics.

Source: Thomas A. Foster and Richard Armstrong (2004). "Top 25 Third-Party Logistics Providers Extend Their Global Reach," in *Global Logistics & Supply Chain Strategies*, May 2004, pp. 2-11 (reprinted in USITC (2005), *Logistics Services: An Overview of the Global Market and Potential Effects of Removing Trade Impediments*).

Annex 2

Main issues that Members may wish to consider when developing their individual negotiating positions

Horizontal measures	<ol style="list-style-type: none"> 1. Are there any measures that provide for direct or indirect discrimination of foreign providers in the area of taxation, foreign equity limitation and land ownership restrictions? 2. What type of government support is provided to providers of logistics services? 3. Do both domestic and foreign providers receive state support?
Measures affecting cross-border supply (Mode 1)	<ol style="list-style-type: none"> 1. Can non-residents supply logistics services on a cross-border basis? 2. Are there specific logistics services that are restricted (including because considered technically unfeasible) as regards cross-border supply? 3. Are there any legal restrictions on the electronic submission of logistics documents? 4. Where and how clearly are any of the above restrictions spelled out? 5. What are the policy reasons behind the restrictions? 6. Are there less trade restrictive means of achieving the same objectives? 7. Are there any measures put in place to support better ICT allowing for improved cross-border supply?
Measures affecting commercial presence (Mode 3)	<ol style="list-style-type: none"> 1. Are foreign service suppliers required to establish through a particular legal form? If so, which ones? What is the prescribed legal form for the joint undertaking? 2. Are there any nationality requirements (e.g. with respect to the board of directors)? 3. Are there any prior residency requirements? 4. Are there any foreign equity limitations? 5. Are there any restrictions on the movement of professional, managerial, and technical personnel? 6. Are there any requirements for transfer of technology, know-how, managerial skills? 7. Are there restrictions on the use of international foreign firms' names? 8. Are foreign established firms subject to specific performance requirements, including local content and manufacturing requirements, and remittance and foreign exchange restrictions? 9. Where and how clearly are any of the above restrictions spelled out? 10. What are the policy reasons behind the restrictions? 11. Are there less trade restrictive means of achieving the same objectives?
Measures affecting movement of natural persons (Mode 4)	<ol style="list-style-type: none"> 1. Are there limitations on the number of persons that a logistics firm can transfer as intra-corporate-transferee? 2. Are there limitations on the number of persons de-linked from Mode 3, such as transport labourers, drivers or freight handlers?

	<ol style="list-style-type: none"> 3. Are there specific (educational, qualification, licensing) requirements for providers of logistics services? 4. Are there prior experience requirements or post qualification experience requirements attached to the granting of the visas or of work permits? 5. How are entry and work permits obtained? 6. Are there time limitations on the presence of foreign service providers (e.g. duration of stay)? 7. Is the entry of foreign service providers subject to economic needs tests?
Measures relating to domestic regulation	<ol style="list-style-type: none"> 1. Is there an adequate legal framework supportive of trade in logistics services and which recognizes the legal effects and validity of electronic data messages and transactions? 2. Are there provisions in the domestic law that protect service providers from corruption, theft and accidents? 3. Are there any qualification or licensing requirements or procedures or technical standards which affect (trade in) logistics services?
Issues relating to technical and security standards, professional qualifications, etc.	<ol style="list-style-type: none"> 1. Are technical, industry and security standards being implemented? 2. Are these standards transparent and non-discriminatory? 3. Is there an independent body monitoring the implementation of these standards? 4. Is there widespread data security in the country? 5. What conditions must foreign service providers fulfil in order to meet the requirements of existing mutual recognition agreements (MRAs) to which the host country is a party to? 6. Do foreign service providers need to be locally established in order to be eligible for participation in a MRA?
Universal access	<ol style="list-style-type: none"> 1. What universal service regulations apply? 2. May the government impose on service providers obligations relating to development of infrastructure relating to logistics services? 3. What measures/mechanisms are in place for the achievement of public service obligations? 4. Are these measures objective and transparent? 5. Are foreign service suppliers subject to different conditions than domestic suppliers in relation to public service obligations?
Implementation of Article IV and contributions to competitive services and exports in developing countries	<ol style="list-style-type: none"> 1. Are there any policies, initiatives to improve the quality and competitiveness of logistics services in developing countries (including through encouragement of transfer of technology, joint ventures, etc.)? 2. Do commitments exist or are commitments being offered in modes of export interest to developing countries? 3. Can one envisage logistics-related Article XVIII additional commitments as a tool for implementing Article IV?
Issues relating to the adequate technology, equipment, etc.	<ol style="list-style-type: none"> 1. In there the adequate ICT to allow for exchanging information, entering into contracts and tracing goods during transit? 2. In there both public and private investment in related technology and infrastructure? 3. Is there a sufficient number of trained personnel to deal with ICT and containerized cargo efficiently?

	<p>4. Are there public policies aimed at improving the overall quality of the technology in the country?</p> <p>5. Are there any restrictions on the temporary admission of equipment necessary to carry out the services in a foreign market and restrictions on the servicing of such equipment?</p>
Competition issues	<p>1. Are there sectoral exemptions to competition law in the importing country affecting conditions of competition in logistics services markets?</p> <p>2. Is there competition between domestic service providers of logistics services?</p> <p>3- Are contracts awarded in a transparent manner (e.g. by using tender procedures)?</p> <p>4. Are any of the services provided by logistics service providers still in the reserved domain of a state monopoly (e.g. postal monopoly)?</p> <p>5. Do any of the licenses grant exclusive rights?</p> <p>6. How does the competition law define and deal with instances of abuse of monopoly power? And cartels?</p> <p>7. Is there both public and private participation in ports?</p> <p>8. Is ownership of certain transport facilities reserved to the state?</p>
Preferential liberalization measures MFN obligation	<p>1. Are there any preferential agreements, including in the regional context, affecting the supply of any of the logistics services?</p> <p>2. Do these preferential arrangements apply to the movement of natural persons?</p> <p>3. Do any of these preferential access measures favour developing countries?</p>

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