EXECUTIVE SUMMARY

This note examines the importance of transport in promoting trade and economic developments. It highlights the factors affecting transport costs and the fact that inexpensive and high-quality services are increasingly important for trade and production patterns. It observes that low trade volumes may lead to situations where the supply of transport services becomes uneconomic, leading in turn to a downward spiral of lower demand and corresponding supply. The challenge for policy makers is to reverse such a vicious cycle and promote trade through better and less costly transport services. The note also reviews the impact of the latest developments on international transport and trade facilitation, including the following: the development of multimodal transport and logistics services; laws and regulations governing multimodal transport adopted at the regional and subregional levels as well as ongoing legislative work at the international level; security initiatives adopted by the United States, the International Maritime Organization’s ISPS (International Ship and Port Facility Security) Code, the International Labour Organization’s Seafarers’ Identity Documents Convention and the proposal by the European Commission; and information and communication technologies. The note concludes that although these developments present considerable trading opportunities and provide access to global markets, their adaptation poses significant challenges for most developing countries. There is therefore a need for developing country Governments to establish appropriate policies and strategies for the development of efficient transport services.
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Introduction

1. The availability of efficient transport services is crucial for economic development, as transport services are essential for reaching world markets, strengthening global integration and attracting foreign investment. At the Johannesburg Conference on sustainable development, delegates called for an integrated approach to policy-making at the local, national and regional levels for transport services with a view to providing safe and efficient transport. The conference recognized that to benefit from liberalized trade opportunities, developing countries needed to improve their transport and communication infrastructure, as well as their multimodal transport services. Infrastructure, superstructure and equipment for the movement of containerized goods from door to door, including sea, road, rail and air connections as well as ports and terminals, need to be available. The private sector continues to become involved in the operation and partial financing of transport facilities, taking over from the public sector.

2. In recent decades, globalization and technological developments have changed the approach to production, trade and transportation, both in developed and in developing countries. This trend has resulted in a continuous shift of manufacturing to countries offering a competitive advantage. The impact of this shift on transport is reflected by China's 50 per cent increase in imports and 33 per cent increase in exports for the first six months of the year compared with 2002. Thus logistics has become an important value-added service in the global production and marketing of goods. Transport has become part of the production and distribution process to obtain a competitive advantage for manufactured goods. The main providers of international transport and logistics services are concentrated into a relatively small number of carriers (MaerskSealand, Mediterranean Shipping Company, P&O Nedlloyd, etc.), terminal operators (Hutchinson Port Holdings, Port of Singapore Corporation, P&O Ports, etc.) and logistics providers (Kuehne & Nagel, Panalpina, etc.). Consequently, since limited opportunities exist for newcomers in this global market, there is a need to focus on local and specialized services.

3. Increased containerization has facilitated the through movement of goods using different modes of transport and is expected to double in the next decade. To meet this demand, major carriers are investing in larger container ships and it is estimated that as of July 2003 there are now over sixty 8,000 TEU class vessels on order in addition to the first three that have been delivered to Overseas Orient Container Line. Furthermore, MaerskSealand has 19 vessels in service with a capacity of around 8,000 TEU (although only specified at 6,600 TEU). International transport of goods is increasingly carried out on a door-to-door basis using two or more modes of transportation. Shippers and consignees are often interested in dealing with one party who arranges transportation of goods from door to door and assumes contractual responsibility throughout. Local transport service providers have an important role to play as subcontractors of the multimodal transport operator.

4. Access to state-of-the-art transport services is a key determinant for the competitiveness of individual firms and countries. Developing countries need to improve physical, institutional and legal infrastructure to create an environment for transport services that will facilitate both investment and trade. While much of international trade is conducted on a door-to-door basis under one contract and with one party responsible, the current legal framework fails to reflect these developments. The international community is thus faced with the challenge of establishing a uniform legal regime to allow further development of multimodal transportation.

5. Advances in information and communication technology have further impacted on trade and transportation processes. Development of sophisticated management and operating systems has

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1 Lloyds List, 25 July 2003. The OOCL Long Beach is 323 metres long and 42.8 metres wide, and has a capacity of 8,063 TEU (see www.oocl.com).
provided efficient cost control, optimum use of equipment and a new quality in customer relations. Developing countries need to put in place the necessary physical and legal infrastructure to benefit from information and communication technology. Providers of transport services also need to develop information systems to improve their competitiveness. The existing legal infrastructure needs to be adapted to the requirements of electronic transactions.

6. The implementation of trade and transport facilitation measures has been at the forefront of recent international deliberations and has decisively influenced the international trade agenda. Competitiveness for many developing countries is negatively affected by administrative delays at border crossings resulting from unharmonized and cumbersome procedures. Coordinated trade facilitation measures have become an important tool for developing countries to reduce transaction costs. However, their implementation requires assistance in terms of expertise and funding. Following the terrorists attacks of 11 September 2001, security considerations have led to major changes in trading practices. The United States legislation on maritime transportation and port security has introduced compulsory measures and procedures for all traders and service providers with respect to goods to or through the United States with significant cost and liability implications. The adoption of the International Ship and Port Facility Security Code (ISPS) by the International Maritime Organization in December 2002 is a response by the international community to this concern.

7. All of these measures have potentially significant implications for trading practices and consequently transaction costs. The emergence of unilateral approaches by individual Governments and regional bodies imposing global solutions will increase transaction costs with a negative impact on traders, particularly those from developing countries. A major challenge for developing countries is to put in place the necessary procedures and equipment to comply with such regulations. However, it is expected that compliance with security requirements will lead to more rapid clearance of goods and thus more reliable delivery of goods traded internationally.
Chapter I

Impact of transport on development

8. Transport is of increasing relevance to the development of nations. It is a crucial determinant of production and trade patterns and consequently also of economic integration. For some countries it may also contribute to the generation of income through the provision of transport services. Participation in world trade depends increasingly on the type, quality and costs of transport services. At present, intra-company trade and trade in intermediate products are growing faster than trade in finished goods. This trend is closely linked to improvements in transport and logistics services.

9. The international economy has resulted in the globalization of manufacturing processes. As transport costs decrease even further, and delivery times and reliability continue to improve, production is becoming more dispersed. Multinational companies may still design the products in their headquarters, but assembly is likely to take place in a number of different countries, with imported materials and components from wherever these are provided at the best price and quality.

10. This type of specialization is closely linked to trends in transport and logistics. It provides opportunities and risks for developing countries. The least developed countries (LDCs), most landlocked developing countries and many small island developing States are in danger of not benefiting from the opportunities because their transport services are insufficient in the light of today’s requirements concerning logistics and multimodal transport services.

11. International transport costs alone tend to be around three times higher than customs import duties. Traditional gravity models, which simply assume that countries that are closer to each other also trade more with each other, are insufficient to explain the dynamic nature of today’s trade patterns. This is why transport services and infrastructure need to be incorporated in modern trade models and, consequently, trade policies.

12. In order to explain who trades what with whom, and by what mode of transport, it is not enough to look only at transport costs. Other quantitative aspects such as connectivity, safety, security, reliability, service speed, port facilities and inland connections also need to be taken into account. Furthermore, it is not only the supply of transport services that influences trade, but also vice versa: different volumes and types of trade encourage the supply of different types of transport services. From being an external factor, transport has become an integrated part of the global production and distribution system.

13. Recent research not only uses transport cost data to explain trade, but also undertakes regression analysis to investigate the factors influencing transport costs. The explanatory variables used in such analysis are basically related to distance and connectivity, and to country characteristics. Inclusion of infrastructure measures significantly improves the estimation results, corroborating the importance of infrastructure in determining transport costs. Distance on its own is not a good proxy for transport costs and has a relatively minor impact. Port reform, the level of competition, and – above all – scale economies in turn have proved to have a strong impact on transport costs, and thus also on trade and income distribution. Economies of scale from high trade volumes have a strong impact on transport costs. Therefore, the strong observed negative correlations between trade and transport costs reflect not only the elasticity of trade towards transport costs, but also the economies of scale through which higher volumes lead to lower costs of transport.

14. It is important to understand this mutual relationship, because it can give rise to a virtuous or a vicious cycle. A successful policy will encourage adequate transport services, which promote trade, which in turn leads to further improvements in transport services. A disadvantaged country, on the other hand, with low trade volumes will have difficulty in escaping from a vicious cycle where a lack of supply of transport services is an obstacle to trade. This in turn will discourage suppliers of quality
multimodal transport and logistics services from offering their services to importers and exporters from the disadvantaged country, thus further increasing transaction costs.

15. Despite the fact that international transport costs are declining, it is observed that regional trade is growing (even) faster than interregional trade. Intra-Asian container traffic, for example, is growing faster than global container traffic and over the last few decades, intra-European or intra-MERCOSUR trade has been increasing at a higher rate than trade between these two regional blocs.

16. Some of the intraregional trade growth certainly has less to do with transport and more with regional trade agreements and is often facilitated by a common language, historical trends, trade facilitation at common borders and lower intraregional tariffs. But some of the reasons are connected with transport costs and options: as explained above, owing to larger traded volumes, unit transport costs decline (economies of scale) and frequencies, competition and speed increase. Also, at a regional level, more transport options (road, rail) are available. This in turn reduces delivery times, allows for more just-in-time delivery, and thus increases the demand for goods and components. In other words, more trade leads to better and less expensive transport services, which in turn again lead to more intraregional trade.

17. The impact of better and less expensive transport on trade is equivalent to the impact of lower tariffs, and the relatively faster growth of intraregional trade does not contradict the common observation that goods and components are increasingly purchased globally. A large part of the growth of intraregional trade replaces previous “national trade”, that is between departments or states of the same country, and is not a diversion of imports or exports that would otherwise be bought from or sold to countries outside the region. Just as most analyses of free trade agreements, including the European Union, conclude that trade creation has dominated trade diversion, so improved transport costs and services on a regional level are to be seen as a result and a component of the entire process of globalization.

18. As in the relation between globalization and international transport, the relation between regional integration and regional transport is twofold: less expensive and better intraregional transport services lead to further regional integration, and at the same time regional integration also affects the markets for transport services. Within the European Union, maritime cabotage services are liberalized for European-registered vessels, trucks from member countries are free to move national cargo in other countries, and common standards help to create not only a common market for goods, but also a common market for transport services. This is part of a virtuous cycle, where transport and regional integration mutually benefit each other.

19. Most international transport continues to include a seaborne leg and, historically, the most industrialized countries were also those that had large national fleets, manned by national seafarers, built in national shipyards and flagged at home. Globalization has made shipping a highly competitive industry. Today, a ship may be registered in one country, its owner from another country and its operator from a third country and the “components” of the shipping service, such as insurance, equipment, the work of seafarers, bunkering, ship repair or certificates of classification societies are very likely to have been purchased in a number of different countries. This has actually given rise to new opportunities for developing countries, whilst traditional industrialized countries are losing their market shares in several subsectors.

20. In the past, developing countries sought to increase their market share in the shipping industry in order to generate income. These attempts were supported by the United Nations through a number of initiatives, such as the adoption, under the auspices of UNCTAD, of the Convention on a Code of Conduct for Liner Conferences, 1974. Today, for most developing countries, having access to adequate and inexpensive international transport services has become more important than generating income with the supply of such services. However, many developing countries have gained comparative advantages in certain maritime subsectors, and further liberalization of maritime transport within WTO negotiations might even be to their benefit.
Chapter II

Developments affecting international transport and trade facilitation

A. Multimodal transport and logistics services

21. According to an earlier UNCTAD secretariat study, \(^3\) “the world of transport has changed considerably over the last few decades. International transportation of goods is increasingly carried out on a door-to-door basis, involving more than one mode of transportation. While there is little information on the overall proportion of cargo transported by multiple modes, data on the development of containerized traffic provide some highly significant indications, as containers are designed for transportation by different modes.

22. Since the advent of the container in the mid-1960s, there has been an exponential increase in containerized transport, which is forecast to continue well into the future:

- **World port container throughput**, i.e. the number of movements taking place in ports, has grown from zero in 1965 to 225.3 million moves in 2000. Container traffic is forecast to more than double until 2010 to almost 500 million moves; this represents an annual growth rate of 9 per cent. While globally the major container flows are between Asia, Europe and North America, there are significant flows within all regions.

- **World seaborne trade in containerized cargo** is estimated to more than double from 1997 to 2006 to around 1 billion tons. \(^4\) Most of this containerized cargo will involve transportation by more than one mode before reaching its final destination. In particular the first and the last leg of any door-to-door transaction will usually involve transportation by another mode, such as road or, to a lesser extent, rail.

- There has been significant growth in trade in manufactured goods, as a result of globalization, leading to foreign direct investment in factories and assembly plants in regions with lower labour costs and good access to trade routes. In 2000, the **value of manufactured goods exported globally** (f.o.b.) had risen to 75 per cent of all goods exported (~ 4.7 trillion US$ out of a total of ~ 6.2 trillion US$). The majority of manufactured goods moving by sea will be transported in containers.”

23. Increasingly, multimodal transport (MT) is becoming an integral part of logistics services that include transport, storage and distribution together with the related information management. This integrated approach is important to bear in mind as it allows three technically related functions and consequently types of cost, namely transport, handling/storage and administrative cost, to be combined under the heading of logistics. The implementation of the logistics function thus permits a trade-off between these three cost elements in order to arrive at a systems optimization, which is clearly more relevant than the optimization of sub-functions such as transport. Such logistics concepts have proved to be an indispensable means of reducing transport, storage, packing and related costs as well as of improving the quality of delivered goods with an impact on the performance and competitiveness of the companies concerned.

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\(^3\) Multimodal transport: The feasibility of an international legal instrument, UNCTAD/SDTE/TLB/2003/1, 13 January 2003, p. 4.


24. Liner companies have sought to realize rationalization gains by entering into global alliances. While undoubtedly having a positive impact on operational efficiency, they have not always fulfilled expectations that participating carriers may have entertained. Alliances do not address some of the major cost elements, that is cost of cargo acquisition and administration, thus stopping short of making the real cuts that companies might seek in order to improve their profitability and competitiveness. Furthermore, alliances will at some stage have to address the issue of inland transport and logistics. Some of the major problems of shipping lines are linked to pre- and onward carriage and equipment control, which are essential elements of implementing differentiation strategies. Consequently, it does not appear logical that alliances concentrate only on the port-to-port side of the transport business. Therefore, shipping lines increasingly seek to ensure long-term profitability through diversification into MT and logistics services.

### Logistics services in China

China already accounts for about 20–25 per cent of global containerized import and export volumes. However, at present China's through transport systems are limited and only a relatively small number of containers are moved inland. Inland transport costs are up to 50 per cent more than in Europe or the United States. Legislative and customs procedures are being reformed. The Government is addressing these issues and logistics is central in its current five-year plan, with a budget of US$ 18 million. Road, rail, inland waterway and coastal shipping infrastructure are being modernized and expanded, and multimodal transport hubs and regional distribution centres are being created.


25. In an attempt to implement differentiation strategies, shipping lines are increasingly moving into logistics services, while maintaining ocean carriage as a core business. This move from “hardware-based” service suppliers into a service industry that is driven by know-how and information technology is expected to open up new opportunities for shipping lines. It opens the door to an industry that is estimated to provide for an annual business volume of around US$ 100 billion and, most importantly, for above average growth rates.

26. Shipping lines moving into MT and logistics services increasingly compete with freight forwarding companies that produce similar services. In fact, the freight forwarding industry can be considered more of a forerunner in these services than liner shipping or, for that matter, other modal carriers. Freight forwarders were pressured into multimodal and logistics services, as they had to understand already in the 1970s that there was only a limited future, if any, in traditional agency based freight forwarding business. Today, the freight forwarding industry is going through a consolidation process, which is similar to that of the shipping industry. Additionally, linkages are becoming closer and more freight forwarding companies team up in one way or another with shipping or other transport companies.

27. Further concentration on the sea leg could characterize future development, with companies providing shipping as a core around which MT services will be built. This concentration process will further change the competitive environment on the sea leg, and enable remaining companies to provide the necessary investment in hardware and use the latter in a commercially viable fashion. Those companies that will not be among the global carriers can be expected to increasingly engage in niche
operations, become shareholders in globally operating companies or continue to provide global transport and logistics services without owning or even operating sea-based assets.\(^6\)

**B. Legislative initiatives**

28. Despite the continued growth of containerization and multimodal transport at the global level, there is no international instrument in force to govern liability arising from multimodal transportation. The United Nations Convention on International Multimodal Transport 1980 has not received sufficient ratifications to enter into force. The UNCTAD/ICC Rules for Multimodal Transport Documents 1992 are of a contractual nature and are not effective as a means of achieving international uniformity. The lack of a widely acceptable international regime in force has led national Governments and regional and subregional bodies, particularly those of developing countries, to resort to individual and widely divergent solutions, for example:

- **The Andean Community**, in an effort to harmonize the multimodal transport rules and regulations within the subregion, enacted in 1993 *Decision 331 International Multimodal Transport*, which was substantially modified later in 1996 by Decision 393. The member States of the Andean Community in which these laws and regulations apply are Bolivia, Colombia, Ecuador, Peru and Venezuela.

- **MERCOSUR** adopted in 1995 the *Partial Agreement for the Facilitation of Multimodal Transport of Goods*, which aims at facilitating multimodal transport within member States. The member States of MERCOSUR in which the Agreement is to apply are Argentina, Brazil,\(^7\) Paraguay\(^8\) and Uruguay.\(^9\) The provisions of this Agreement, however, will only apply if specific reference to the Agreement is made in the MT contract (article 4).

- The **Asociación Latinoamericana de Integración (ALADI)**, at the Third Ordinary Meeting of Ministers of Transport, Public Works and Communication of South America, approved by Resolution 23 (III) the *Agreement on International Multimodal Transport* in November 1996. The member States of ALADI in which the Agreement is to apply are those of the Andean Community and MERCOSUR as well as Chile. For it to enter into force (article 46), the Agreement requires notification by six signatory States of their readiness to be bound by it. So far, three States have subscribed to the Agreement: Bolivia, Peru and Venezuela.

- The members of the **Association of South-East Asian Nations (ASEAN)**, in the preamble of the *Draft Framework Agreement on Multimodal Transport*, recognize that international multimodal transport is a means of facilitating the expansion of international trade and the need to stimulate the development of efficient multimodal transport services, as well as the desirability of adopting certain rules relating to the carriage of goods under international multimodal transport contracts, including provisions concerning the liability of the multimodal transport operators.

29. While the substantive provisions of these laws and regulations are mainly derived from those of the UN Convention on Multimodal Transport and the UNCTAD/ICC Rules, there are important differences among them on key issues such as basis of liability, limitation of liability and time-bar. Furthermore, within the Latin American region individual countries such as Argentina and Brazil have also enacted legislation substantially different from that adopted by the relevant regional/subregional

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\(^7\) Decree No. 1563 of 19 July 1995 implements the Agreement in Brazil.

\(^8\) Decree No. 16,927 of 16 April 1997 implements the Agreement in Paraguay.

\(^9\) Although Decree No. 99/95 of 8 August 1995 implemented the Agreement in Uruguay, a court of law (Tribunal Contencioso Administrativo) in Uruguay suspended application of the Decree as of 9 November 1998.
bodies. This situation creates uncertainty as to the law applicable to a given contract. This is particularly important bearing in mind the wide scope of application of these laws and regulations covering international multimodal transport contracts to and from the particular country or region.10

30. The lack of a uniform liability regime governing multimodal transport and the proliferation of diverse regional, subregional and national approaches prompted a number of organizations, such as the UNECE, the Commission of the European Community, OECD, CMI and UNCITRAL, to initiate investigations into the subject with a view to finding a possible solution. Following the Plan of Action (TD/386) adopted by UNCTAD X, the UNCTAD secretariat prepared a report reviewing the implementation of the existing rules and regulations at the regional, subregional and national levels.11 An inquiry was then conducted into the feasibility of establishing a new international instrument to govern liability arising from multimodal transportation. A questionnaire was circulated to all Governments and industry as well as to interested intergovernmental and non-governmental organizations and a number of experts on the subject.

31. The large number of replies received (a total of 109 replies: 60 from Governments and 49 from industry and others) demonstrated the importance attached by both Governments and industry to the subject. The survey clearly revealed the general dissatisfaction with the current legal framework for multimodal transport (83 per cent of respondents) and the desirability of establishing a new international instrument to govern liability arising from multimodal transportation (92 per cent of respondents). Virtually all respondents (98 per cent) indicated they would support any concerted efforts in this direction.

32. The results of the survey were published in a report and were also submitted to the UNCITRAL Working Group on Transport Law,12 which recently began consideration of a Draft Instrument on Transport Law.13 The Draft Instrument was primarily to cover contracts for carriage of goods by sea. Nevertheless, it has a broad scope of application and as currently drafted would cover all contracts for multimodal transport involving a sea leg. At its last meeting in March 2003, the Working Group in considering the controversial question of the scope of application of the Draft Instrument decided, tentatively, to proceed on the basis that the Draft Instrument would apply to all contracts involving a sea leg. Concerns have been expressed regarding the application of the Draft Instrument to multimodal transport contracts.14 The Draft Instrument, if adopted, could impact on the ability of developing countries, particularly landlocked countries, to benefit from the potential advantages offered by multimodal transportation. The active participation of developing countries in the negotiations is therefore essential in order to ensure that their interests are taken into consideration in the preparation of any future convention.

C. Security

33. Following the events of 11 September 2001, maritime and port security has generated significant attention, both at the national and the international level. A terrorist incident directed at the international transportation system could lead to interrupted service, port and terminal closures and delays to cargo and passenger traffic with potentially catastrophic effects on world trade. To address

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10 For further information concerning the laws on multimodal transport adopted at the regional, subregional and national levels, see the UNCTAD secretariat report Implementation of Multimodal Transport Rules, UNCTAD/SDTE/TLB/2, and the comparative table UNCTAD/SDTE/TLB/2/Add.1.
11 UNCTAD/SDTE/TLB/2 and Add.1.
13 UNCITRAL document A/CN.9/WG.III/WP.21
14 For a detailed commentary on the Draft Instrument by UNCTAD see UNCTAD/SDTE/TLB/4. For comments by UNCTAD and UNECE see also UNCITRAL document A/CN.9/WG.III/WP.21/Add.1.
the problem a number of initiatives have been introduced to put in place measures to enhance the security of international maritime trade. Implementation of these initiatives clearly involves extra costs in terms of purchase of equipment, additional staff and new procedures along the international supply chain, which will be passed on to the cargo interests. The following is a brief description of some of the main developments.

i. United States security initiatives

34. These initiatives include measures varying from mandatory legislation to voluntary programmes, namely the Trade Act of 2002, the Maritime Transportation Security Act 2002, Presentation of Vessel Cargo Declaration to Customs (24-hour-rule), the Custom Trade Partnership Against Terrorism (C-TPAT), the Container Security Initiative (CSI) and Operation Safe Commerce (OSC). The measures focus on improving the security of ports and shipping, including tighter control of incoming container traffic through advance information, pre-inspection for loading of selected containers and improved transparency along the supply chain. These initiatives affect all trades to or via the United States, including the smaller players involved in international trade and transport.15


35. At its Diplomatic Conference in December 2002, the International Maritime Organization (IMO) adopted the ISPS Code as part of an amendment to the SOLAS Convention on Safety of Life at Sea. The objectives of the Code are to establish an international framework involving cooperation between Contracting Governments, government agencies, local administrations and the shipping and port industries to detect security threats and to take preventive measures against security incidents affecting ships or port facilities used in international trade. The Code further establishes the respective rules and responsibilities of the parties involved at the national and international levels for securing maritime security. It provides a methodology for security assessment in order to have in place plans and procedures to react to changes in security levels. The Code will enter into force on 1 July 2004. The implementation of the ISPS Code is mandatory for all SOLAS Contracting States irrespective of their level of development.

36. The Code will require the implementation of security plans, including the appointment/designation of appropriate personnel on each ship, in each shipowning company and in each port facility. According to the recent OECD report,16 over 46,000 ships and nearly 4,000 ports are involved in international trade and will be required to comply with the ISPS Code. Ships will also be required to be equipped with automatic identification systems (AIS), to display ship identification numbers and to fit ship security alert systems. This report estimates the initial ISPS Code compliance costs for ship operators at around US$ 1.3 billion (excluding the cost of the Automatic Identification System), followed by annual expenditure of US$ 730 million.

37. Estimating the staff and equipment costs for implementing the port facility security plan is extremely difficult given the great variability of needs and costs from port to port. For example, costs for fencing, lighting, secured gates, communication equipment, closed circuit TV monitoring equipment and detection devices will vary tremendously according to port size and equipment needs. Some ports have already invested heavily in security infrastructure and equipment. Therefore, it is not possible to estimate the global cost. However the US Coast Guard has made an estimate of these costs for the United States based on the new investments required to comply with the ISPS Code. It has estimated that the initial cost for equipment and guards would be US$ 963 million, followed by an

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15 For more information see the UNCTAD Transport Newsletter, February 2003, The Impact of Transport Security Initiatives on Developing Countries, pp. 10-18, www.unctad.org
annual cost of US$ 509 million. The additional investment required in some developing countries will be substantial and immediate.

iii. **Seafarers' Identity Documents Convention**

38. The International Labour Organization at its Conference in June 2003 adopted a new Convention on Seafarers' Identity Documents to create a secure, internationally recognized biometric identity card for the world's 1.2 million seafarers. The Convention creates a more rigorous identity regime for seafarers, sets out the basic parameters with details in annexes for the precise form of the document and includes a biometric template based on a fingerprint. It requires each commercial seaman in international trade to carry a biometric ID card based on a fingerprint template encoded in bar code, conforming to a standard to be developed. The Convention will come into force six months after the ILO receives two ratifications. The Convention requires countries to issue the cards to each of its nationals who are seafarers and to those seafarers who have been granted permanent residence. Governments are further required to establish and maintain a national electronic database of the cards issued, suspended or withdrawn that will be available to allow immediate authentication of the identity card by authorized officials.

iv. **European Commission proposal**

39. The European Commission has proposed to the European Parliament and Council that it adopt a Regulation on enhancing ship and port facility security. In its Communication, the Commission takes the view that the security of the entire transport chain from the supplier to the consumer needs to be enhanced. The proposal therefore goes beyond the framework developed by the ISPS Code. It is expected that the Regulation will be adopted in the near future.

D. **Information and communication technologies**

40. Information and communication technologies (ICT) continue to enhance the productivity and competitiveness of transport service providers. ICT has become an essential tool for the exchange of business information with clients and suppliers and for the effective management of the enterprise. All parties involved in the transportation chain are adapting their practices in order to take advantage of the benefits offered by ICT. For example, electronic communication means are currently used by carriers to provide up-to-date information on shipping schedules, tariffs, cargo booking, cargo tracking, cargo declarations and preparation of transport documents. The use of ICT enables entrepreneurs in developing countries to access a greater range of trade-supporting services, thus allowing them to optimize their transport requirements. As global e-business keeps growing at a fast pace, enterprises and economies that do not adopt e-business practices risk losing competitiveness and market shares.

41. Major developments in the transport field include the continued development of portals and websites for shipping services, port community systems and logistic providers. The number of users of the three portals for carriers — CargoSmart, GT Nexus and INTTRA — continues to grow and all portals have introduced features to help shippers input the necessary information electronically for the US Customs 24-hour rule requirements. The advance submission of cargo information in electronic form has now become compulsory. Shipping instructions and bills of lading can be prepared on-line, thus saving time and reducing errors. Furthermore, container carriers have continued to develop their own websites, providing more and more transaction capabilities, in addition to also being linked to the three portals.

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17 OECD, p. 43.
19 The UNCTAD Transport Newsletter, February 2003, provided an analysis of the transaction capabilities of the websites of the top 20 container carriers, UNCTAD/WEB/TLOG/2003/1, p. 8.
42. Ports are seeking to integrate their various systems to provide more accurate and timely information flows within the port community. The mega-terminal operating company, Hutchison Port Holding, has set up its own e-commerce initiative. This offers a range of different services, including maritime procurement, asset management, transport planning and procurement, freight settlement, information management and transport logistics service. The Port of Singapore Authority Corporation has been using its expertise in its Portnet.com system to develop port community systems in Dalian (China), Seattle (United States) and South Africa.

43. The secretariat's document submitted to the Expert Meeting on Electronic Commerce and International Transport Services in September 2001 examined legal and documentary issues in more detail. It reviewed the role of transport documents, particularly that of the negotiable bill of lading, in the functioning of international trade transactions. It highlighted a number of legal issues and uncertainties arising from the application of the existing laws and transport conventions in an electronic environment, including the challenge of replacing the negotiable bill of lading by an electronic alternative. Attempts to facilitate the development of electronic transport documents, including both contractual and statutory approaches, were reviewed. The meeting suggested that although legislative solutions were needed, contractual approaches offered an interim solution.

44. The UNCITRAL Model Laws on Electronic Commerce (1996) and on Electronic Signatures (2001) remove some of the legal uncertainties surrounding the use of electronic communications in international trade. The Draft Instrument, currently under consideration within UNCITRAL, aims at further removing legal barriers by allowing the use of both “electronic records” and “paper transport documents” and giving them equal legal status. However, the discussions on the Draft Instrument are still in their preliminary stages. If, in due course, ongoing deliberations lead to the adoption of a new transport convention, which effectively addresses the use of electronic equivalents to traditional transport documents, an important step in facilitating international trade and transport will have been taken.

45. While progress has been relatively slow, it is evident that electronic commerce and ICT will continue to be an important feature of the international transport and trading system. It is therefore essential that policy makers establish a clear strategy for the development of a favourable environment for the use of ICT in this context.

E. Forthcoming events: Impact on trade facilitation

46. The first International Ministerial Conference on Transit Transport Cooperation was held in Almaty, Kazakhstan, in August 2003. It analysed inter alia the role of trade facilitation in improving the efficiency of existing transport infrastructure in landlocked and transit developing countries. In particular, the Parallel Event on Trade Facilitation Measures, organized by UNCTAD, focused on strategies for landlocked and transit developing countries to develop sustainable capacity to plan and implement regional trade and transport facilitation initiatives. It considered a number of solutions, including institution building, developing networks and the use of new technologies, and private and public partnerships at the bilateral and regional levels.

47. This parallel event was complemented by an event organized by UNECE on regional approaches to trade and transport facilitation. The session focused on the challenges faced by landlocked and transit countries in Asia, Africa, the Middle East and Europe. It reviewed the practical steps implemented through the UN regional commissions to introduce trade and transport facilitation measures.

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20 TD/B/COM.3/EM.12/2, Part II.
21 The Chairman's Summary of the Roundtable is contained in the Annex.
48. The Fifth Ministerial Conference of WTO, to be held in Cancún, Mexico, in September 2003, will have significant implications for trade facilitation. According to the Doha Declaration, “negotiations on trade facilitation will take place after the Fifth Session of the Ministerial Conference on the basis of a decision to be taken, by explicit consensus, at that Session on modalities of negotiations”. Also, the declaration recognizes the case for “further expediting the movement, release and clearance of goods, including goods in transit, and the need for enhanced technical assistance and capacity building in this area”.

49. Thus in the area of trade facilitation, the Ministerial Conference will consider the work carried out by the Council for Trade in Goods and decide on the modalities of negotiation of WTO rules in this matter. The Conference will also outline the commitment of WTO Members regarding trade-related technical assistance and capacity building, particularly for the LDCs, taking into account their respective development dimension.

50. The regional Conference for Latin America and the Caribbean on ICT Strategies for Competitiveness and Development: Promoting E-business, Trade Facilitation and Logistics will be held in Rio de Janeiro, Brazil, in November 2003. It will review the impact of ICT on development, in particular as a means of improving the efficiency of trade and transport services and of promoting economic growth through participation in global trade.

Summary and conclusions

51. The review of developments affecting international transport services and trade facilitation has illustrated the challenges and opportunities arising from such developments. Adapting the existing physical and legal infrastructure necessary for the provision of logistics services and multimodal transport will provide an important opportunity for developing countries to participate in global trade. Similarly, ICT offers tremendous possibilities to all parties involved in international trade and transport to have access to global markets and to monitor and control the supply chain.

52. Compliance with the new security measures will clearly provide a major challenge for most developing countries, particularly the LDCs. While it is generally agreed that there is a need to enhance maritime and port security, the position of developing countries needs to be considered in the process. The implementation of the proposed measures clearly entails significant cost implications. This will create a heavy burden for some developing countries. Failure to comply with the required measures could prevent them from participating in international trade and thus result in their further marginalization.

53. This note has also demonstrated the important role that transport plays in promoting trade and thus economic development. As pointed out earlier, access to adequate and reliable transport services is essential in order to take advantage of globalization. It is therefore important that Governments give high priority to the development of international transport services. In particular, transport and legal infrastructure, ICT, institution building and the transfer of know-how need to be considered as key elements in this context.

54. These issues, particularly that of multimodal transport and logistics services, will continue to play a dominant role in the development process. Thus, they warrant in-depth analysis by future Expert Meetings of UNCTAD so as to determine policies and strategies for maximizing their potential benefits to developing countries, bearing in mind the latest developments.
Annex

Roundtable on Trade Facilitation Measures

Almaty, Kazakhstan, Thursday, 28 August 2003

International Ministerial Conference on Transit Transport Cooperation

Chairman’s Summary
Ambassador Matthias Meyer, Switzerland

Trade facilitation is about providing an environment for trade and transport that reduces the cost of international trade transactions. For landlocked and transit developing countries transaction costs can be excessive, often pricing exports out of the international market and significantly increasing the costs of imported goods. Reduced transport availability and excessive transport and trade-related costs can thus constitute major barriers to foreign markets and to an effective integration of landlocked developing countries in the global economy. Efficient trade facilitation therefore leads to better trade integration and stimulates local and international investment.

Based on the UNCTAD issue note prepared for this Roundtable, there are a number of main areas that call for improvement, particularly in the context of landlocked and transit developing countries: (1) Regional transport corridors can play a major role in facilitating transit transport but require a consensus between countries on common rules and standards; (2) Regarding infrastructure, countries should make every effort to construct “missing links” in regional transport networks and to encourage competition between transport modes; (3) Transport policies should promote the integration of local transport operators into global transport systems allowing them to take advantage of advanced technologies and operating practices; (4) Partnerships among trading and transport agents, private and public, can improve trade management.

The Minister of Transport from the Islamic Republic of Iran highlighted the priority being given to the development of new transit corridors serving both the international transport needs of neighbouring countries as well as the national transport needs supporting local economic development along these corridors. The new North-South transit corridor will provide a much cheaper sea-access route for Central Asian countries than existing options. The Minister stressed his Government was actively seeking the participation of foreign investors in these developments.

The meeting noted that a number of international institutions and donors are giving increasing attention to trade facilitation initiatives. This situation requires multilateral, regional and subregional coordination in order to secure the efficient implementation of trade facilitation programmes. These programmes need to cover the concerns of different sectors of the national economy, in particular Customs, Commerce, Transport and Security. Stakeholders are not only public institutions but also private trade and transport companies and individuals that may be affected by Government’s policies and actions. The programmes need therefore to be comprehensive and coherent to secure tangible benefits within a reasonable time frame. Furthermore, advantage should be taken of the expertise of regional development organizations that can tailor global initiatives into regional solutions.

The meeting also noted the need for building the management capacity of public administrations to better adapt internationally-agreed trade and transport instruments and commercial best practices. The experience from developed countries shows that this endeavour requires considerable time and resources. Equally there was a need to strengthen the commercial capabilities of national service suppliers and to increase the competitiveness of the transport services sector. Partnerships with the foreign private sector may offer the possibility to improve these transport services.
The panel included representatives of four international organizations, namely the World Customs Organization, the UN Economic Commission for Europe, the UN Conference on Trade and Development and the World Bank. In a coordinated and single presentation, the four organizations delivered a unified message. They observed that institutional instruments (e.g. the revised Customs Kyoto Convention, UNECE recommendations) have been developed; that a number of diagnostic methodologies related to Customs, trade and transport have been established; and that information technology and specific tools (e.g. ASYCUDA and ACIS) are available. However, trade facilitation is not just about standards and technology, it is equally about rationalizing and integrating business and administrative processes. While international organizations and donors can assist countries, it is up to their Governments to effectively implement changes. This calls for a strong and continuous political will, supported by appropriate facilitation mechanisms (e.g. facilitation bodies, clusters, etc.), at national and subregional levels.

The meeting also referred to the situation in the Central Asian region for which, in most of the countries, the complexity of international trade and transport is relatively new. Participants and panellists made specific mentions of the excessive bureaucracy the outdated or — sometimes — non-existent regulations, the lack of harmonization of codes, procedures, and documents both at national and regional levels. Some participants commented on their programmes and activities to improve this situation. A panellist also indicated that the present capacity of local providers of international transport services was limited. Increasing the competitiveness of this sector and fostering partnerships with foreign operators would stimulate trade and development.

The Roundtable concluded that more efficient trade facilitation has high economic benefits. Particularly in landlocked countries, it can be a crucial element for increased trade. Trade facilitation is also perceived as a factor of good governance and will stimulate both national and foreign direct investment. The development of international transport corridors is recognized as a high priority. They benefit not only landlocked countries but are also “win-win” investment for transit countries when they are linked to in-country investment and growth along the corridors. Finally, the discussion on trade facilitation was considered timely, given the fact that the international community will have to decide, at Cancún, in two weeks’ time, whether trade facilitation rules should be negotiated at WTO.