AN ASSESSMENT OF MARITIME TRANSPORT AND RELATED LOGISTICS SERVICES IN EGYPT

Ahmed Ghoneim and Omneia Helmy

Working Paper No. 125
September 2007

This study was funded by the International Centre for Trade and Sustainable Development (ICTSD), Geneva. However, the views expressed herein are solely those of the authors and do not reflect the official views of ECES or ICTSD. The usual caveats apply.

Ahmed Ghoneim is Associate Professor of Economics, Faculty of Economics and Political Science, Cairo University. Email address: aghoneim@gmx.de. Omneia Helmy is Professor of Economics, Faculty of Economics and Political Science, Cairo University and Lead Economist, the Egyptian Center for Economic Studies. Email address: ohelmy@eces.org.eg. The authors would like to thank Hanaa Kheir-El-Din for her invaluable comments on this version of the study, and Ismail Mobarek, Mona El-Garf and Johannes Bernabe for their constructive comments. Special thanks also go to Sara Al-Nashar and Maha Abdel Fattah for their efficient research assistance.

Abstract

This study provides an assessment of the status of maritime and related logistics services in Egypt in order to identify the impact of trade liberalization on this sector. Moreover, it attempts to identify the reasons behind the weak performance of some maritime and related logistics services, and provides some policy and regulatory suggestions to improve such services and enhance Egypt's competitiveness. The study finds out that the maritime and related logistics services in Egypt suffer from a number of regulatory and policy pitfalls including overlapping jurisdictions between different authorities in ports, absence of separating ownership and regulation, heavy governmental control over pricing, domination of public sector in logistics services and lack of clear regulations. The study proposes a number of policy recommendations including the need for establishing an effective independent regulator for the maritime sector, fixing the pricing systems of logistics services while enhancing the financial autonomy of port authorities, accelerating automation procedures of ports, overcoming the scarcity and inconsistency of data, creating an efficient regulatory framework for multimodal operations, enhancing cooperation with international institutions, and promoting public-private partnerships.

ملخص

تهدف هذه الدراسة إلى تقييم مدى كفاءة قطاع النقل البحري والخدمات اللوجيستية المرتبطة به في مصر بغية تحديد أثر تحرير التجارة على هذا القطاع. كما تقوم بتحديد أسباب ضعف أداء بعض الخدمات في هذا القطاع ثم تطرح مجموعة من المقترحات التنظيمية وفي مجال السياسات بهدف رفع كفاءة تقديم هذه الخدمات وتعزيز القدرة التنافسية للاقتصاد المصري. وقد وجدت الدراسة أن قطاع النقل البحري والخدمات اللوجيستية المرتبطة به في مصر يعاني من بعض القصور في القواعد التنظيمية له وفي مجال السياسات، ومن أمثلة ذلك تداخل الاختصاصات بين مختلف السلطات في الموانئ، وعدم فصل الملكية عن التنظيم، وتحكم الحكومة بشدة في تحديد أسعار الخدمات، وهيمنة القطاع العام على تقديم الخدمات اللوجيستية وعدم وجود قواعد تنظيمية واضحة. وفي هذا الصدد، تقدم الدراسة عددا من المقترحات في مجال السياسات تتضمن إنشاء جهاز تنظيمي مستقل لقطاع النقل البحري، وتطوير أنظمة تسعير الخدمات اللوجيستية مع تشجيع الاستقلال المالي لهيئات الموانئ، والإسراع بتحديث الموانئ والتعامل الإلكتروني بها، والتغلب على ندرة وتضارب البيانات، وإعداد إطار تنظيمي كفء لعمليات النقل متعدد الوسائط، وتعزيز التعاون مع المؤسسات الدولية، وتشجيع المشاركة بين القطاعين العام والخاص في هذا المجال.

1. INTRODUCTION

Empirical evidence identified the importance of maritime transport and related logistics services efficiency as a major determinant of competitiveness. For example, Ximena, Dollar, and Micco (2002) focused on the impact of ports' efficiency on shipping costs. They identified that inefficient port services are equivalent to a 60 percent increase in distance away from markets for an average country. They pointed out that there are several reasons behind inefficient port services, which include excessive regulation and the general condition of a country's infrastructure. Inefficient border measures related to logistics increase transaction costs for traders and can also result in loss of business opportunities and impose inventory-holding costs on traders[1] (Essawy and Ghoneim 2005). Technological advances and infrastructure modernization including containerization, usage of e-commerce and global manufacturing and production processes such as the implementation of supply chain management techniques and just in time production processes have increased the interest of World Trade Organization (WTO) Members in maritime, logistics and multimodal[2] services since they act as determinant variables in affecting their competitiveness. As a result, there have been increasing calls from WTO Members for including logistics and multimodal services under the General Agreement on Trade in Services "GATS" (UNCTAD 2006a).

Maritime transport and related logistics services play an important role in Egypt's economy and international trade. For example, Egypt's maritime ports handle more than 65 percent of Egyptian exports (Al Tony 2005). Recent efforts to upgrade and reform ports and port services have resulted in significant improvements when compared to the past where the costs of handling a container in Alexandria port were 30 percent higher than

[1] Costs for inventory-holding include both lost interest on capital tied up in goods at ports, as well as the need to keep larger buffer-stock inventories at the final destinations in order to accommodate possible variations in border clearance times.

[2] The concept of transportation as a door-to-door service rather than port-to-port. Multimodal transport enhances the efficiency of transport as a single carrier coordinates the movement and documentation among different modes of transportation. Multimodal is sometimes referred to as intermodal, however multimodal extends between different countries using different modes of transport whereas intermodal is confined to different modes within the same country.

similar ports in the Mediterranean (World Bank 1997), however several problems remain untackled.

Indicators of port efficiency such as dwell time[3] and overall fees for container transport point out that Egypt is lagging behind when compared to other competitors, lessening the competitiveness of Egyptian exports and increasing transaction costs for traders. Moreover, inefficient maritime and related logistics services implied the loss of revenues that could have occurred to the Egyptian economy from utilizing the natural comparative advantage of Egypt as a regional hub for transshipments. The need to understand the reasons and consequences of such inefficiency of maritime transport and related logistics services, the desire to cope with international best practices in such areas and the requests from WTO Members for Egypt to liberalize these services represent the main reasons behind undertaking this study. Improving the efficiency of maritime and related logistics services can have significant positive spillover effects on encouraging private investments, promoting trade flows, and subsequently enhancing production and job creation in a large number of sectors in the economy that are strongly linked to exports and imports. Moreover, upgrading maritime transport and related logistics services can have wider developmental benefits in terms of overcoming some of the urgent environmental concerns.

This study focuses on the measures that can influence maritime transport and related logistics services in Egypt such as the institutional infrastructure, regulatory framework and policies adopted. The paper also deals with policies and regulations, which affect other issues such as multimodal services, development of containerized transport (which allowed large cost reductions in maritime transport and cargo handling), commercial routes (which are more liable to competition and less subject to monopoly power) and private anti-competitive practices (which include the practice of fixing rates of maritime conferences and controlling port services). The study assesses the status of maritime transport and related logistics services from three angles where it provides a description of the existing regulatory and institutional framework, identifies the market structure that has resulted from such framework and analyzes the different policies adopted. The paper highlights

[3] Time spent since the container is unloaded from a ship until it is reloaded, either empty or full.

major deficiencies that affect the performance of these services and fleshes out the positive developments that have taken place so far. The study focuses on the maritime transport and related logistics services based on the United Nations Central Product Classification, as shown in Annex 1).

Following this introduction, the study starts in Section 2 by providing an overview of Egypt's services profile where the importance of the services sector in the Egyptian economy in terms of contributing to the gross domestic product (GDP), employment and current account is identified. In addition, the major services in which Egypt enjoys a comparative advantage are determined. In Section 3, national policy objectives with regards to services are highlighted, focusing specifically on maritime transport and related logistics services. The Government of Egypt's multilateral, regional and unilateral efforts to liberalize trade in services and enhance their efficiency are discussed. In Section 4, the main constraints facing maritime transport and related logistics services in Egypt are identified and their impact on the performance of these services is assessed. In Section 5, an overview of multimodal transport services in Egypt is provided and the main constraints facing them are determined. In section 6, specific regulatory and policy reforms are proposed to help enhance the efficiency of maritime transport and logistics services in Egypt.

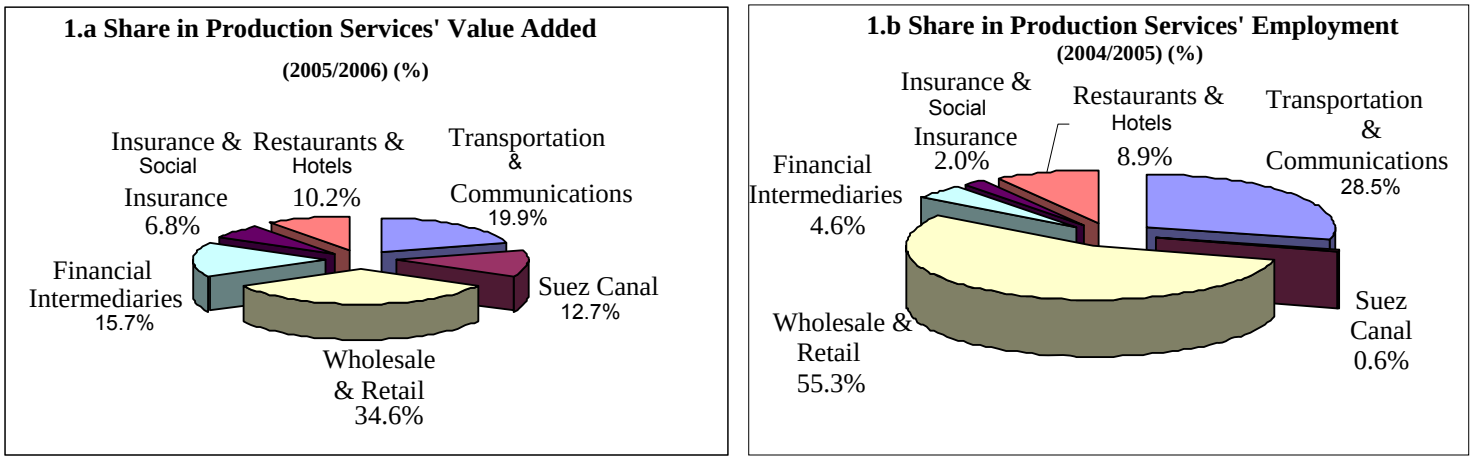
2. OVERVIEW OF EGYPT'S SERVICES PROFILE

In 2005/2006, services constituted 48 percent of GDP in Egypt, out of which 20 percent were provided solely by the government[4] and 28 percent were jointly provided by the government and the private sector. The share of services in employment reached 51 percent in 2004/2005 where government employees represented more than half of this percentage. Maritime transport and other production services[5] contributed nearly 32 percent to value added in 2005/2006 and more than 16 percent to employment in 2004/2005 (Ministry of Economic Development 2007a). Figure 1 shows the decomposition of production services among its different sub-sectors in terms of value added and employment shares.

[4] Provision of some social services such as real estate registration and student's health insurance are the sole responsibility of the government.

[5] Production services include transport, communications, Suez Canal tolls, wholesale and retail trade, finance, insurance and social insurance, and restaurants and hotels.

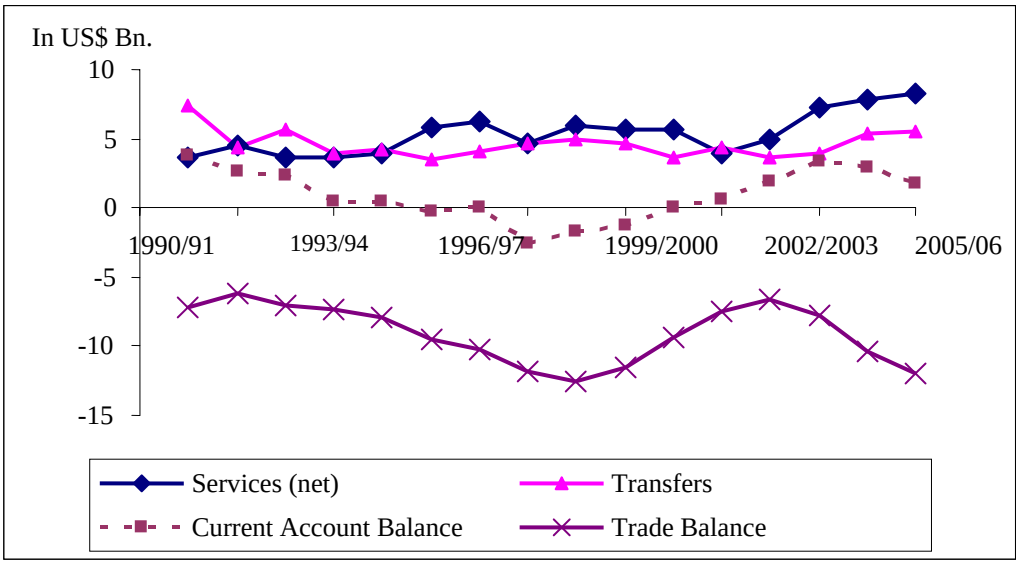
Figure 1. Production Services in Egypt



Source: Ministry of Economic Development (2007a).

Service exports play an important role in overcoming the chronic deficit in merchandize trade balance, leading to a surplus in the current account and improving the status of the balance of payments (see Figure 2). There has always been a surplus in the services balance mainly due to exports of transport (Suez Canal tolls) and tourism. Investments in the services sector have increased over time where private investments have surpassed public investments in some sectors by 2004/2005 as the case with telecommunications, tourism and construction. Foreign investments (proxied by foreign participation in issued capital) have increased over time in the services sector. Most of the foreign participation is concentrated in certain sectors as telecommunications, followed by tourism and financial services. It is worth noting that the breakdown of foreign participation in the services sector changed dramatically after huge investments were injected into the telecommunications sector. For example, in the year 2000 the bulk of foreign investments was concentrated in the transport sector followed by tourism and financial services and insurance. In 2006, the highest contribution of foreign participation was in telecommunications followed by tourism, and financial services and insurance where transport's share was modest (General Authority for Investment and Free Zones 2007).

Figure 2. Services in the Egyptian External Sector (1990-2006)



Source: Central Bank of Egypt (2007).

United Nations Conference on Trade and Development (UNCTAD) data showed that Egypt's rank among leading exporting developing countries has deteriorated between 2001 and 2004 in a large number of services sectors, though not significantly. Nevertheless, data revealed that Egypt enjoys a revealed comparative advantage (RCA) in a number of services including transport (mainly because of Suez Canal tolls), travel, communications and construction.

Egypt used to enjoy an RCA in other business services in 1995, but has lost it in 2000 onwards, though there is a great potential for increasing the exports of such services, especially back office services. Table 1 shows the RCA of Egypt in different services.

Table 1. Revealed Comparative Advantage (RCA)* of Egypt in Different Services Sectors

	1980	1985	1990	1995	2000	2003	2004
Transport	1.47	2.03	1.56	1.54	1.23	1.40	1.34
Travel	0.88	0.44	0.53	0.95	1.47	1.46	1.52
Other services	0.63	0.67	1.04	0.73	0.60	0.57	0.57
Communications	..	..	..	1.23	1.43	1.29	1.30
Construction	..	..	..	0.00	0.60	1.20	1.68
Computer and information services	..	..	..	0.01	0.08	0.05	0.06
Insurance	0.26	1.06	0.37	0.07	0.16	0.12	0.10
Financial services	..	..	..	0.21	0.08	0.13	0.08
Royalties and license fees	..	..	..	0.11	0.11	0.20	0.11
Other business services	0.89	0.86	0.95	1.09	0.95	0.76	0.86
Personal, cultural and recreational services	..	..	..	0.03	0.11	0.48	0.34
Government services n.i.e.	0.40	0.54	3.77	1.01	0.44	0.77	0.36

* The RCA index of country i for service j is often measured by the service's share in the country's exports in relation to its share in world trade: $RCA_{ij} = (x_{ij}/X_{it}) / (x_{wj}/X_{wt})$, where x_{ij} and x_{wj} are the values of country i's exports of service j and world exports of service j and where X_{it} and X_{wt} refer to the country's total exports and world total exports. A value of less than unity implies that the country has a revealed comparative disadvantage in the service. Similarly, if the index exceeds unity, the country is said to have a revealed comparative advantage in the service.

Source: Calculated by the authors based on UNCTAD (2006) online database.

3. NATIONAL POLICY OBJECTIVES IN RELATION TO TRADE IN SERVICES (WITH A FOCUS ON MARITIME TRANSPORT AND RELATED LOGISTICS SERVICES)

The economic and social development five-year plan for Egypt during the period (2007/2008-2011/2012) aims at enhancing the competitiveness of the Egyptian economy, promoting exports of goods and services at an annual rate of 12 percent and encouraging private sector's participation in economic activity, particularly in service sectors (Ministry of Economic Development 2007b). Recognizing that services play a key role in achieving these national objectives, the Government of Egypt's multilateral, regional and unilateral efforts to liberalize trade in services and enhance their efficiency will be discussed in this section.

3.1. Liberalization of Trade in Services: Egypt's Multilateral Commitments

Egypt's commitments under the GATS are in five main sectors, namely telecommunications, tourism, construction, financial and maritime sectors. In the maritime

transport sector, Egypt's commitments are very modest including two main activities: passenger and freight international maritime transport, and port dredging (see Annex 3). Commitments made include certain constraints on foreign investment and labor participation. In the field of passenger and freight transport, joint establishment of companies is subject to a limitation on foreign participation (not to exceed 49 percent) so that the vessel can raise the Egyptian flag and 95 percent of the crew must be Egyptians with their wages representing 90 percent of the paid wages. Joint establishment of companies for the purpose of port dredging (deepening and cleaning of ports) is allowed a maximum of foreign equity share of 75 percent with Egyptian labor not less than 25 percent and Egyptians represented in the board of directors to the extent of not less than 25 percent (see Annex 3). Such commitments obviously do not reflect the changes that occurred in the maritime transport sector and related logistics services starting 1996 when new laws (Law 1/1996 and Law 1/1998) were issued, which allowed private (domestic and foreign) sector's engagement in building private ports and in being engaged in an array of port and logistics services as will be explained below. Egypt's GATS commitments were rather in a middle rank among countries in the Mediterranean region such as Malta, Cyprus, Jordan, Morocco and Tunisia.

In December 2004, Egypt submitted an initial offer under the ongoing Doha Round negotiations including new sub-sectors of construction and refining its economic needs test in insurance. The revised new offer submitted in June 2005 included new commitments in air transport, courier services and computer services, and increasing level of commitments in insurance and construction. Moreover, Egypt received plurilateral requests for opening up further service sectors including telecommunications, computer, postal and courier, distribution, environment, energy, construction, financial services, air transport, maritime services, legal services, logistics, as well as liberalization of rules governing the supply of services through the means recognized under the GATS, i.e., Mode 1 (cross-border supply), Mode 2 (consumption abroad) and Mode 3 (foreign direct investment in services). Most of the requests Egypt received were from developed countries. Finally, Egypt has joined the plurilateral request of a number of developing countries requesting developed countries to liberalize Mode 4 (entry and temporary stay of workers abroad).

Logistics services are difficult to define in the context of the WTO. The agreed upon definition is "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." In 2001, the WTO Secretariat issued a background note describing logistics services to include general and value-added logistics (WTO 2001). *General logistics services* listed included storage, loading/unloading, stripping and stuffing, consolidation and distribution. *Value-added logistics* included: repackaging, customizing, assembly, quality control, testing, repair, equipment maintenance, equipment renting and leasing, cleaning facilities, tanking, information and communications, safety and security services and offices (UNCTAD 2006c).

In 2004, eleven members of the WTO (developing and developed) tabled a joint proposal to encourage WTO Members to consider liberalizing logistics services and offered a checklist of services commitments, which would facilitate effective provision of logistics services[6] (see Annex 2 for the checklist). In February 2005, the Friends of Logistics Group[7] made a joint statement, endorsed by a mix of developed and developing countries, urging members to actively engage in negotiations with a view to undertaking commitments on logistics services. In February 2006, ten members[8] presented a collective request covering logistics services. The targeted group comprised 33 WTO Members, 26 of which were developing countries, including Egypt (UNCTAD 2006a).

[6] 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.

[7] The Friends of Logistics Group brings together WTO Members interested in securing commitments on services required in order to provide an integrated door-to-door cargo movement. 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.

[8] Australia, Chile, Hong Kong (China), Japan, New Zealand, Switzerland, and the separate customs territory of Taiwan, Penghu, Kinmen and Mastu.

Besides GATS commitments, Egypt is a member of different United Nations (UN) maritime conventions including the UN Liner Code[9] of 1974, which entered into force in 1983, the UN Concession on Carriage of Goods by Sea of 1987 (Hamburg Rules),[10] which entered into force in 1992, and the UN Concession on Conditions for Registration of Ships of 1986, which still has not entered into force as it requires 40 signatories—a requirement that has yet to be satisfied (UNCTAD 2004). Egypt is not a member of the UN Convention on International Multimodal Transport of Goods of 1980; however, the Convention still has not entered into force as it needs 30 signatories and it has presently only 10. Membership of Egypt in such international agreements reflects the interest of Egyptian authorities in adopting international norms in certain areas of the maritime and related logistics services and being a part of the international community. However, it is important to emphasize that being a signatory of an international agreement in the field of maritime transport and logistics does not ensure a certain level of expectations in the performance of those sectors. In other words, the aforementioned international agreements and conventions do not provide tools for punishing non-compliant countries or rewarding adhering countries.

3.2. Liberalization of Trade in Services: Egypt's Regional Initiatives

On the regional level, Egypt is negotiating liberalization of services within the context of the Arab GATS and the Egypt-European Union (EU) Association Agreement based on a GATS-plus approach. No concrete commitments have been undertaken. However, within the context of the Arab GATS during the last round of negotiations Egypt and Jordan have initiated full liberalization of three sectors among them adopting a sectoral approach. Egypt has also submitted requests for a number of the Arab GATS Members to liberalize professional, communications, construction, financial, transportation, audio-visual and tourism sectors, in addition to mode 4. It has received requests from members of the Arab

[9] A convention drafted under the auspices of the United Nations Conference on Trade and Development (UNCTAD) which provides that all shipping traffic between two foreign countries is to be regulated as far as the quantities of shipments are concerned on the following percentages: 40 percent for owners of the country of origin, 40 percent for owners of country of destination and 20 percent for owners of the country, which is neither the origin nor the destination.

[10] Rules governing the rights and responsibilities of carrier and cargo interests which may be incorporated into a contract for the carriage of goods by sea either by agreement of the parties or statutorily. These rules were adopted by the United Nations Convention on the Carriage of Goods by Sea in 1978.

GATS concerning horizontal commitments, business, communications, construction and financial services.

Within the Egypt-EU Association Agreement, no sectoral negotiations have started, however the Association Agreement and the Action Plan following the Neighborhood Policy, which was signed between Egypt and the EU in March 2007, included cooperation in transport and financial services and approximation of Egyptian laws with EU laws. Regarding maritime transport the Action Plan emphasized cooperation between the European Union and Egypt regarding development of the landlord model[11] of ports in Egypt and ending the discrimination against the EU regarding the treatment of European vessels vis-à-vis the Egyptian vessels in Egyptian ports (see Section 4).

3.3. Liberalization of Trade in Services: Egypt's Unilateral Efforts

On the unilateral level, domestic liberalization of services exceeds Egypt's GATS commitments in a large number of sectors. For example, in the case of maritime and related logistics services the investment law (Law 8/1997) identified international maritime as a sector open for private (domestic and foreign) investments, including transportation of materials, goods and passengers beyond territorial waters by means of ships and other maritime means of transport such as tankers, steamers and ferries. Moreover, it allowed establishment of containers' operations and handling stations as well as grain-silos including all related loading and unloading activities to be free from any restrictions.

Maritime specific laws do not impose any restrictions on cross-border supply of foreign shipping companies (international shipping and cabotage, both liner[12] and tramp[13]), though the foreign supplier must nominate a local agent. There are no restrictions on

[11] The landlord model involves three institutional layers where the government defines the sector policy, port authorities are in charge of regulation and private companies compete in the provision of port services. The private operator invests in infrastructure and owns and operates the superstructure. The landlord scheme tends to be called a 'mono-operating' system because the same operator who has the concession is also usually the only company that provides the stevedoring services on a given terminal. The main alternative system is the 'tool port' usually applied as 'multi-operator' (open access stevedoring) system, which implies that the public sector provides the infrastructure and superstructure, and different private stevedoring companies use these under hourly or daily rental schemes. Mono-operator is not to be confused with a monopolist.

[12] A cargo-carrying ship, which is operated between scheduled, advertized ports of loading and discharge on a regular basis.

[13] Vessels operating without a fixed itinerary or schedule or charter contract.

application of the principle of reciprocity, on the number of foreign suppliers and on bilateral agreements including cargo-sharing clauses. Conferences[14] are not present in the Egyptian case, and are not granted any sort of a preferential treatment, neither were they mentioned in the regulations of that sector. A large number of such unilateral liberalization steps has not been tabulated in Egypt GATS commitments. However, Egypt discriminates in favor of vessels raising the national flag in terms of prices paid for port services. It is worth noting that there is no common practice adopted in the competing ports where a country like Malta does not adopt discrimination (following its GATS commitments) whereas a country like Jordan adopts a discriminatory approach where service fees for pilotage, berthing and docking are reduced by ten percent for Jordanian vessels (following its GATS commitments).

For Egypt to become a regional hub for transshipments and containerized trade, the government decided to adopt a master plan (2001-2017)[15] to modernize Egyptian ports by creating independent profit-oriented, cost-based corporations to manage the ports, adopting the landlord principle, whereby operating functions are devolved to specialized private sector firms working under the monitoring and supervision of the new corporations. Moreover, policies will be adopted to enhance the operating efficiency of Egyptian maritime ports, introduce electronic data interchange (EDI) systems, develop multimodal transport, connect maritime ports with domestic transport networks and achieve higher safety and security levels in all modes of transport. Further deepening of the Suez Canal to reach a depth of 72 feet is intended to facilitate huge vessels traffic.

Investment funds allocated for the transport sector in the economic and social development plan have increased from 13.2 billion Egyptian pounds in 2005/2006, to 17.2 and 29.3 billion Egyptian pounds in 2006/2007 and 2007/2008, respectively (Ministry of Economic Development 2007b). This reflects the increased interest of the government in enhancing the efficiency of the transport sector.

[14] Conference agreements are made between two or more ocean common carriers, and provide for the fixing of and adherence to uniform tariff rates, conditions of service, etc. among them. They are cartel-like agreements and are the most widespread type of rate-binding agreements. They are sometimes referred to as liner conferences. For more details on conferences and their impact on increasing maritime costs, see Fink, Mattoo, and Negau (2002); François and Wooton (2000); and Andriamananjara (2001).

[15] Interviews revealed that such plan is not being effectively implemented.

Although more than 23 percent of public investment funds allocated to the Ministry of Transport in 2006/2007 are earmarked for maritime ports and related logistics services, these funds remain short of the investments needed per one port, such as the Alexandria port or Damietta port (Ministry of Transport 2006a). Therefore, it is imperative to attract more private (domestic and foreign) investments towards maritime transport and related logistics services.

4. Performance of Maritime Transport and Related Logistics Services

The purpose of this section is to identify the main constraints facing maritime transport and related logistics services in Egypt and assess their impact on the performance of these services.

4.1. Binding Constraints Facing Maritime and Logistics Services

In Egypt there are 82 ports,[16] out of which there are nine main commercial ports (Alexandria, El-Dekheila, Port Said, Safaga, East Port Said, Damietta, Adabiya, Suez, and El-Sokhna), six general commercial (not main) ports and 67 specialized ports.[17] There are dry ports (nine ports) but some are not used at their full capacity.

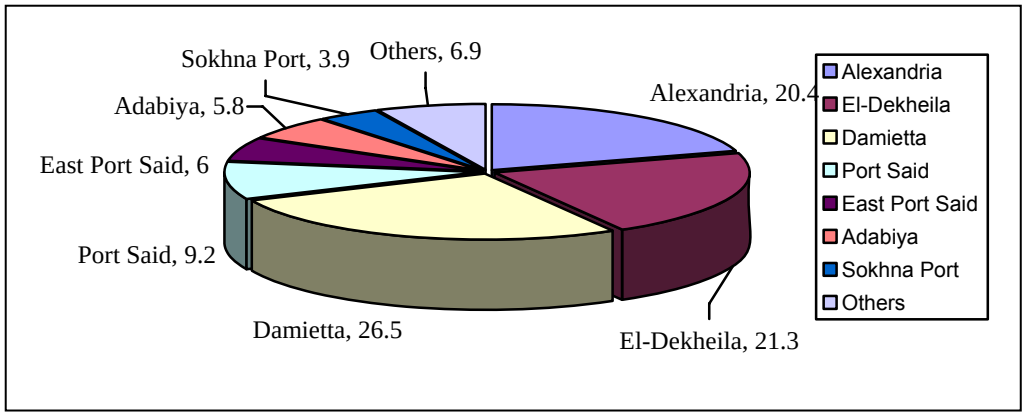
According to the *Egyptian Maritime Data Bank* of the Ministry of Transport, the TEUs[18] handled by all Egyptian ports increased from 435,655 TEUs in the year 1995 to 884,481 TEUs in 2003, a 56 percent increase. Figure 3 shows the share of Egyptian ports in total local and transit cargo handling in 2005. The number of vessels visiting Egyptian ports increased from 8,799 in 1995 to 11,876 in 2003, a 35 percent increase. Alexandria Port is considered the most important port in terms of vessels received by Egyptian ports where it has received in 2005 around 26 percent of total vessels.

[16] It is worth noting that different sources state different figures.

[17] Specialized ports provide specific services such as transporting specific goods (e.g., mining ports, petroleum ports) or services (tourism ports).

[18] TEU is a standard container measure and refers to Twenty Feet Equivalent Unit.

Figure 3. Share of Egyptian Ports in Total Local and Transit Cargo Handling in 2005 (%)



* Others include El-Arish, Suez, Safaga, Hamrawein, Abu Ghosoun and Nuwaiba.
Source: Ministry of Transport, Maritime Transport Sector (2006a).

The capacity of the commercial Egyptian ports reached 135.18 million tons in 2005.[19] The general cargo handled by the ports in 2005 reached 97.5 million tons in addition to 231.6 million tons handled by specialized ports out of which are 230.8 million tons of petroleum products (Ministry of Transport, Maritime Transport Sector 2006b; National Democratic Party 2006).

The number of containers handled by Egyptian ports reached 3.6 million TEUs (divided into 1.2 million TEUs as imports and 2.4 million TEUs as transit).[20] There is a relatively high concentration in the ports' handling of transshipment containers, where Damietta and Port Said handle the majority of transshipment containers in Egyptian main ports, as shown in Table 2 (MEDAmos 2006).

Although container port traffic in Egypt has been experiencing a decline in recent years, the country remains among the largest 20 developing countries in terms of container traffic (UNCTAD 2006b; UNCTAD 2005). Following data from the *Review of Maritime Transport 2006 and 2005,* Egyptian ports' rank for container throughput[21] worldwide has

[19] According to the Ministry of Transport, Maritime Transport Sector (2004), the total capacity of ports reached 70.5 million tons only in 2004 whereas the Ministry of Economic Development (2007b) stated that the total capacity of ports reached 80 million tons in 2005.

[20] In 2006, nearly 66 percent of containers handled were in transit. Transshipments (containers handled that are in transit) could increase the port's revenue because a warehouse nearby can perform value-added activities, such as assembling computers to meet the individual specifications of their destination countries.

[21] The number of movements measured in TEUs.

been the 18th in 2004 and 17th in 2003 among the largest 57 developing countries in terms of container traffic. The status of Egypt in terms of container traffic reflects the comparative advantage that Egypt enjoys being a regional hub for transshipment.

Despite some recent improvements, maritime transport and related logistics services in Egypt face various constraints that limit private sector participation and competition in providing these services and have negative impact on their performance. The main constraints include the inefficiency of the national shipping fleet, weak ports infrastructure, ineffective implementation of regulations, inadequate institutional setup, rigidity in price setting of port fees and services dues, and over-staffing and lack of trained personnel.

Table 2. Transshipment Trade in Egyptian Ports (in TEU)

		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Alexandria & El-Dekheila	Import	2,337	1,134	0,884	4,143	11,780	20,977	100,997	7,408	8,74 8	9,926
	Export	2,351	1,147	0,881	3,806	10,876	21,732	11,476	7,741	8,545	10,819
	Total	4,688	2,281	1,765	7,949	22,656	42,709	22,473	15,149	17,293	20,745
	% of Grand Total	0.8	0.3	0.2	0.9	5.5	6.3	2.5	1.6	1.6	1.5
Port Said & El-Arish	Import	59,695	125,971	120,511	157,340	72,583	136,452	219,281	223,221	227,232	282,353
	Export	58,807	119,813	120,132	154,040	69,463	129,984	178,060	213,212	217,516	254,454
	Total	118,502	245,784	240,643	311,380	142,046	266,436	397,341	436,433	445,248	536,807
	% of Grand Total	19	31	31	36	34	39	43	46	42	39
Damietta	Import	246,515	280,312	268,441	273,455	122,246	185,097	252,297	257,927	315,008	406,267
	Export	242,270	270,491	267,960	268,693	125,254	189,369	246,705	248,287	288,371	372,651
	Total	488,785	550,803	536,401	542,148	247,500	374,466	499,002	506,214	603,379	778,918
	% of Grand Total	80	69	69	63	60	55	54	53	57	56
Red Sea Ports	Import	-----		-----	-----	-----	-----	-----	-----	-----	564,54
	Export	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	Total	-----	-----	-----	-----	-----	-----	-----	------	------	56,454
	% of Grand Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	4
Grand Total	Import	308,547	407,417	389,836	434,938	206,609	342,526	482,575	488,556	551,488	755,000
	Export	303,428	391,451	388,973	426,539	205,593	341,085	436,241	469,240	514,432	637,924
	Total	611,975	798,868	778,809	861,477	412,202	683,611	918,816	957,796	1,065,920	1,392,924

Source: Ministry of Transport, Maritime Transport Sector (2004).

4.1.1. Inefficient national shipping fleet

The size of the Egyptian commercial fleet decreased from a total of 141 vessels in 1999 to 71 vessels only in 2005. Nearly 72 percent of the fleet vessels are more than 15 years old signaling the relative inefficiency of the existing vessels and the likely effects on the degradation of the water system in Egypt.

Currently, the Egyptian fleet handles only 5 percent of Egypt's trade (MEDAmos 2006) down from 10-20 percent of Egypt's trade in the first half of the 1990s (USAID 1996). The government public sector owns 13 percent of the fleet whereas 52 percent are owned by public sector firms, which have been partially privatized, and the private sector owns 35 percent (National Democratic Party 2006). It is prohibited to sell a privately built and owned vessel raising the Egyptian flag without prior permission from the Ministry of Transport, thus constraining private sector participation in this activity.[22]

There are around 90 shipping lines that undertake transactions with Egyptian ports, out of which eight dominate 69 percent of container movements in these ports (MEDAmos 2006; Haiba 2007). This implies high concentration within this activity, which could result in increasing prices of freight and hence negatively affect competitiveness of Egyptian trade. Table 3 shows the main important shipping lines that have made calls to Egyptian ports.

Table 3. Most Important Shipping Lines in Egypt

Rank on the Basis of Calls to Egyptian Ports	Rank on International Level
1- Maersk (Denmark)	1
2- CMA CGM	5
3- K-Line (Japan)	14
4- PON	4
5-YML	18
6- MSC	2
7- APL	6
8- COSCO (China)	9

Source: MEDAmos (2006).

[22] A communication with Dr. Ismail Mobarek, Advisor to the President and CEO of AMIRAL company.

4.1.2. Weak ports infrastructure

There are some characteristics of Egyptian ports which hinder them from undertaking their role efficiently. Among such limitations are the status of existing terminals, which suffer from lack of maintenance (although this service is open for foreign participation following Egyptian domestic regulations and GATS commitments), and the layouts and equipment that do not correspond to the requirements of shipping lines (including insufficient space and water depth unable to accommodate the requirements of containers). The poorly maintained narrow roads inside ports affect negatively the movement of cargo. This has been the case for the Alexandria, Port Said and Damietta ports specifically. The three aforementioned ports have limits with regards to length of ships allowed to enter ports due to their limited entrance canal depth (11.3 meters in Damietta),[23] short quays (12 meters only in Alexandria), and limited area of quays (720 square meters in Damietta). Table 4 shows that Egypt's ports infrastructure lags behind when compared to other competitor ports in the world including United Arab Emirates, Cyprus, Tunisia, Malta, Jordan and Morocco, however it is in a better position when compared to countries such as Turkey and Algeria.

Table 4. International Ranking of Ports' Infrastructure in Selected Countries

Country	**International Rank**
Singapore	1
United Arab Emirates	*9*
Cyprus	32
Tunisia	34
Malta	35
Jordan	49
Morocco	53
Egypt	*61*
Turkey	76
Algeria	78

Source: World Economic Forum (2007).

[23] It is worth noting that the maximum water depth in Damietta port is 15.5 meters compared to the maximum of 18.9 meters in all Egyptian ports which is the case of El-Dekheila. The lower the water depth, the less ability of ports to serve large ships. This is why El-Dekheila remains the most capable port serving large ships in Egypt (see Ministry of Transport, Maritime Transport Sector 2006b).

Recognizing that Egyptian ports infrastructure had fallen behind international standards, it was imperative for Egypt to upgrade its ports in order to accommodate import demand and to enable the country to meet export targets. As an example, the first phase of the Alexandria Port renovation began in 2002 and was completed in March 2007 at a cost of 750 million Egyptian pounds. Renovations included construction of deeper quays to receive larger vessels, redesigning of storage areas, warehouses and associated infrastructure, implementation of a more automated management system and the construction of a new passenger/cruise ship terminal. These renovations resulted in widening roads inside the port, increasing the number of berths from 37 to 59 and minimizing congestion at the port. Instead of serving 40 vessels a month, the port can now serve 60 or 70 vessels a month. The port's handling capacity is expected to increase to 44 million tons per year, up from 32 million tons per year before the renovations. The same 1,000-ton vessel that used to take ten to twelve days to discharge and load, now takes four to five days. Customs clearance time decreased from three to four weeks in 2004, to about one week at present (Craig 2007).

Another example is El-Sohkhna Port that was designed with the objective of handling transshipment traffic, and hence it does not suffer from the same infrastructural constraints as other main commercial ports. However, El-Sokhna port is handling only 500,000 TEUs per year, as it is relatively new, which is expected to reach four million TEUs by 2020 (MEDAmos 2006).

Taking into consideration that environmental issues are an important element in Egypt's overall strategy for sustainable development and economic growth, new projects, expansions and renovations are required by law to obtain an environmental compliance certificate, before obtaining a license (articles 19, 23, 70, 76 and 77 of the environment law 4/1994 and articles 10, 19, 51, 54 and 59 of its executive regulations promulgated by Prime Ministerial Decree no. 1741/2005).

4.1.3. Ineffective implementation of regulations

The regulatory framework governing service sectors is complex where in many cases there are several entities involved in the regulation of each sector. Moreover, the entanglement of general laws and regulations (e.g., the investment law) with sectoral laws

and regulations and overlapping jurisdictions between different ministries and municipalities add to the complexity of the regulatory framework governing services and urge the necessity of undertaking regulatory reforms.

Before 1961, the maritime transport sector and its related logistics services were fully owned by the private sector—except for certain ports that were publicly owned. During Nasser's era and starting in 1961, the ownership of the sector was transferred to the state. Law 12/1964 created state monopolies in all port services; it established the Egyptian Public Organization for Maritime Transport, an independent organization affiliated with the Minister of Transport, which should have been acting as the regulator of maritime sector (USAID 1996),[24] but that role was never actually performed.

In the 1990s, the GoE headed towards changing its policy, and started to implement policies aiming at directing the sector towards a market forces-driven mechanism.[25] Law 1/1996 and its amendment Law 22 /1998 permitted the Egyptian private sector to establish and operate private ports, and participate in managing existing terminals and ports through leasing. Law 1/1998 amending Law 12/1964 permitted the private sector to participate in the maritime transport activities, agencies, ship maintenance and fueling.[26] No restrictions were imposed on private sector participation in a large number of logistics services including stevedoring, cargo handling, warehousing, maritime freight forwarding and maritime agency. Nevertheless, firms require a license from the Ministry of Transport. Also, companies registered under the Investment Incentive Law 8/1997 must obtain a shipping license from the General Authority for Investment and Free Zones (GAFI) adding to the institutional complexity of the sector.

A large number of private sector firms became engaged in the provision of logistics services related to maritime transport. The market structure in shipping agencies includes

[24] USAID (1996) mentioned that the GoE's policy towards the maritime sector started to change in 1981, however no details have been provided on what kind of changes have been adopted.

[25] Decree 3/1993 allowed Egyptian private companies to perform loading and unloading in El-Dekheila port of dry bulk, mostly grain and Decree 19/1996 allowed the same at Damietta, Port Said and Suez ports.

[26] Law 1/1998, Article 1 stated the following: "Natural or juridical persons may exercise business works of maritime transport, shipping, unloading, shipping agencies, ship handling, ship repair and maintenance, maritime supplies, and other maritime transport related works as shall be determined by a decree of the minister of transport and communications, and by virtue of a license to be issued by him."

four public firms and 87 private firms. The stevedoring activity includes two public firms and 17 private firms; container handling activity includes three large public firms and few private firms are specialized in Ro-Ro[27] vessels (the public firms are owned by the three main port authorities: Alexandria, Damietta and Port Said and perform their activities only in their related ports); the storage activity includes two main public firms, and finally in the fields of ship breakers, forwarders and cargo clearance there are around 40 private firms (National Democratic Party 2006).

Despite the fact that there is a large number of private sector firms, many maritime and logistics services remain mainly controlled by large public sector firms. The government still owns stevedoring companies, shipping agencies and shipyards through two holding companies. State-owned companies continue to operate the terminals and warehouses and provide stevedoring and shipping agency services. This is due in part to uneven implementation of Law 1/1998 and Ministerial Decree no. 30 of 1998, which were designed to introduce greater competition into container port services but maintained the restriction that private entry into container port terminals is only allowed in greenfield terminal development, not existing operations. Another obstacle is stevedoring where authorities have allocated specific quays to favorite companies (mainly state-owned firms), hence preventing the establishment of a fair competition environment (Essawy and Ghoneim 2005).

4.1.4. Inadequate institutional setup

Institutional constraints limit private sector's participation and competition in providing services. First, port authorities are the owners, regulators and providers of a large number of services, while they lack financial autonomy. Second, many Egyptian ports remain far from adopting the landlord model. Finally, the Supreme Ports Council's role is relatively ineffective.

There are four port authorities in Egypt controlled by the Ministry of Transport. The four port authorities include Alexandria General Port Authority to which the ports of

[27] Ro/Ro: Roll on/Roll off: loading and unloading of containers on special tractor-pulled trailers.

Alexandria and El-Dekheila belong; Port Said General Port Authority to which Port Said, El-Arish and East Port Said ports belong; Damietta General Port Authority to which Damietta port belongs; and Red Sea General Port Authority to which belong Suez, Adabiya, Safaga, El-Sokhna ports in addition to Sharm El-Sheikh and Hurghada ports, which are passenger ports.

Notwithstanding Law 1/1996 and Law 1/1998 and the development of ports, the maritime transport sector and its related logistics services suffer from conflict of interest as port authorities are the owners, regulators and performers at the same time (where they provide services such as pilotage, safety, and tugboat and are owners of companies that provide stevedoring activities). The landlord type of model has been the model targeted for the main commercial ports. However, in reality what applies is rather a quasi landlord or rather a service port[28] type due to the entanglement of public authorities' ownership of port facilities, its management of the same ports and its undertaking of port services. The main commercial ports (with the exception of El-Sokhna port), continue to be managed by public port authorities with ill-defined incentive framework (National Democratic Party 2006).

Interlocking directorships and shared ownership between the state-operated companies and the port authorities inhibit competition and reduce incentives to maintain and improve port facilities. For example, the port authorities of some ports are shareholders in the container handling company operating in the port where Alexandria Port Authority owns 40 percent of Alexandria Container Handling Company and the Port Authority of Port Said owns 39 percent of Port Said Container Handling Company. This cross-ownership between port authorities and these state-owned service companies blur the boundaries between regulatory and commercial functions, creating a barrier to entry for the private sector in those ports and up to date important port services remain monopolies controlled by the state owned companies, making their market not

[28] Landlord ports are where port authorities own and manage port infrastructure while private firms provide the rest of port and maritime auxiliary services; are able to own superstructure and operate assets pertaining to infrastructure by concessions or licensing. Tool ports are where port authorities own both infra and superstructure but private firms provide services by renting port assets through concessions or licenses. Service ports represent the case where port authorities own assets and supply services by directly hiring employees (Fink, Matoo, and Negau 2002).

contestable in practice though privatization is introduced in theory (Essawy and Ghoneim 2005). For example, in the Alexandria Port Authority there is only one container handling company currently performing, namely, Alexandria Container Handling Company and there is only one warehousing company which is the Egyptian Public Warehousing Company (Ministry of Transport, Maritime Transport Sector 2006b).

The main maritime ports of Alexandria, El-Dekheila, Port Said, Damietta and Adabeya do not operate on a commercial basis. Port authorities lack financial autonomy where they are linked to and financed by the government budget. It is reported that the four main port authorities have been holding debt in substantial amounts, which has been financed by the government, up until 2006 (National Democratic Party 2006; World Bank 1997).[29]

In 2000, Presidential Decree no. 109 was promulgated forming the Supreme Ports Council[30] aiming at formulating the general strategy for all Egyptian ports, proposing legislative and regulatory reforms, monitoring the implementation of all decisions related to port activities and setting the fees for port services (Mobarek 2007). However, it seems that the Supreme Ports Council's mandate has not yet been effectively implemented (National Democratic Party 2006). For example, the Council has not met a single time during the last three years since the appointment of a new cabinet in July 2004.

[29] Interviews confirmed that the financial losses that ports are incurring are a result of their providing free of charge services for certain public firms, and had it not been for these services ports would have been making profits or at least covering their costs.

[30] The Supreme Ports Council is presided over by the minister of transport. Members of this council are: head of the maritime transport sector, head of the Central Administration for Ports and Lighthouses, legal counselor of maritime transport sector, a representative of each of the ministries of defense, interior, tourism and investment, head of the Customs Authority, chairman of the General Authority for Exports and Imports Control, head of the Central Navigational Chamber and three academic experts in the field of maritime transport and ports assigned by the minister of transport.

4.1.5. Rigidity in price setting of port fees and services dues

The prices that private firms offer for some of their maritime and related logistics services are set through ministerial decrees, which preempt the market forces mechanism announced by Law 1/1998.[31]

Port fees and port services dues are set by ministerial decrees, regardless of actual costs and quality of provided services (the exception is El-Sokhna Port). Thus, ports are not free to independently set competitive charges, which is an essential prerequisite for competition and efficient management. Although several reports have questioned the logic behind such system for more than a decade (USAID 1996), the system has remained in place. Such rigidity in terms of price setting has decreased intra-port competition as well as inter-port competition between different terminals and among firms performing in the port.

Concerning prices of logistics services, price floors have been set by the government for warehousing and storage services (Ministerial Decree no. 74/2003) and for cargo handling services (Ministerial Decree no. 72/2003), excluding El-Sokhna and East Port Said. However, Ministerial Decree no. 393/2003 set a fixed price for such services instead of determining floor prices.

The regular services including pilotage, towing, navigation aids and anchorages are mandatory for ships entering any of the Egyptian main ports. Access to services is discriminatory for foreign carriers as opposed to domestic ones in regards to pilotage, towing, navigation aids and anchorages. According to several ministerial decrees, the fees for such services are less for national vessels compared to foreign ones. Moreover, transshipment containers are accorded a discount of 20-50 percent and transit container carriers are accorded 75 percent discount (Ministry of Transport, Maritime Transport Sector 2006b).

[31] Cargo handling is limited or determined by a discretionary decision (Subject to Ministerial Decree number 21/1996) and storage and warehousing services are subject to Ministerial Decrees numbers 30 and 31/1998. In addition, once the licenses are allocated they cannot be sold subject to the previously mentioned ministerial decrees.

4.1.6. Over-staffing and lack of trained personnel

Over-staffing, poor skills and training are among the most prominently cited problems contributing to high costs and inefficient operations in Egyptian ports. Surplus labor, limited resources to acquire modern cargo handling equipment and government policies to maintain or create employment contributed to over-manning in Egyptian ports. There are no recent available data on the size of labor employed in Egyptian ports and public firms concerned with logistics.[32] An old study estimated the size of labor in Egyptian ports to be in the neighborhood of 18,000 workers, excluding the employees of the holding companies. Out of the 18,000 workers there are 3000 employed by state-owned shipping agencies, 5000 in container handling and 10,000 in stevedoring and warehousing (USAID 1996). Such figures on labor are considered high by international standards.

The aforementioned constraints that limit private sector participation and competition in providing maritime and logistics services have had a negative impact on the performance indicators of these services as discussed below.

4.2. Inefficient Maritime Transport and Related Logistics Services

Performance indicators reveal that maritime transport and related logistics services in Egypt are inefficient in comparison to those provided in other countries and to acceptable benchmarks.

4.2.1. Low productivity of stevedoring operations

Stevedoring activities in the main Egyptian maritime port terminals were compared to similar types of activities performed in typical modern international container terminals worldwide. The number of containers moved from a vessel per hour is one of the yardsticks used to determine the productivity of a stevedoring operation where the higher the number of moves the more efficient the service provided. In Egyptian ports, the

[32] Currently, the actual number of employees at the Alexandria Port Authority is around 3300 employees. These are the employees who work directly in the port. A number of other employees have jobs that are related to the port, for example, security, customs and export and import control (a communication with Admiral/Emad Oesha, Alexandria Port Authority).

average rate has been 22 containers per hour per clinch which is less than the best practice rate ranging from 25 moves to 40 moves in some American and Far Eastern ports (see Table 5). Recent studies have reported that the average rate in Alexandria port was 20-25 moves per hour, and is even less to 13-15 moves per hour in bad weather conditions (Mobarek 2007). Such low discharge rates negatively affect the overall costs associated with stevedoring and handling of cargo. Such inefficiency is partially associated with old equipment and their lack of maintenance (such as old gantry cranes, forklifts and terminal contractors in ports), and lack of hinterland facilities as sufficient warehouses, besides the lack of trained human personnel (USAID 1996; Burrell and Ghoneim 2004).

4.2.2. Excessive dwell time

Dwell time[33] is relatively excessive in Egyptian maritime ports and adds considerable expense to an import shipment. The average dwell time according to Maersk/Sealand's statistics is 21 days in the three main commercial seaports (Alexandria, El-Dekheila and Damietta).[34] The official sources reveal that the average dwell time in Egyptian main ports is 3.6 days (Ministry of Transport 2005) whereas recent studies assert that the dwell time in El-Sokhna port is four to five days compared to an average of 20 days in other Egyptian ports (Mobarek 2007). Such inconsistency in data is one of the major features of the maritime and related logistics services, which needs to be overcome to be able to arrive at suitable policy recommendations. The length of dwell time could be attributed to importers and brokers failing to file declarations and clearance documents in a timely fashion. Other studies have determined that excessive dwell time can be attributed to customs processing or quality control inspections. Reasons are many and varied, and statistics are not available to determine the frequency of this problem (Burrell and Ghoneim 2004). Table 5 provides some information on the status of logistics services in Egypt compared to other countries.

[33] Time spent since the container is unloaded from a ship until it is reloaded, either empty or full.

[34] Other studies have reported that dwell time in Alexandria port is 11-15 days (see Burrell and Ghoneim 2004).

Table 5: Performance Indicators of Egyptian Ports

Indicator	Best Practice	Egyptian Ports
Dwell time (general cargo)	7-12 days	5-20 days
Dwell time (containers)	4-7 days	5-20 days
Loading and unloading (discharge) rates	25-40 containers per hour per clinch	22 containers per hour per clinch
Overall fees for container's transport	120-180 US$	300-350 US$

Sources: National Democratic Party (2006); Al Tony (2005).

4.2.3. Costly containers' handling services

Containers' handling services are inefficient. It was estimated that terminal handling services represent more than 20 percent of freight expenses in Egyptian ports compared to an average of eight to ten percent in the surrounding Mediterranean ports (USAID 2000; Mobarek 2007). Such inefficiency in containers' handling can be attributed to many reasons. For example, the system for containers' warehousing does not use the new advanced techniques in allocating the place of containers and handling equipment of containers used are old. Moreover, there are problems with setting of unregulated containers and open-top containers where the registering issues are not done efficiently. The transfer of containers from ports to dry ports is done under the supervision of customs and police where the customer bears all the fees and the delay. There are no representatives from the supervising authorities in the dry ports and in case of conflict on customs issues between importers and the customs authorities in dry ports, they have to refer back to the original port. In addition there are no consolidation facilities outside ports to handle LCL[35] export cargo shipments.[36] Moreover, containers do not use inland water transport and rarely use railways due to several associated infrastructure problems and bottlenecks.

4.2.4. Cumbersome clearance procedures

Despite recent improvements, some cumbersome clearance procedures remain. Based on interviews, it was noted that the clearance time has been significantly reduced in the last

[35] Less Container Load.

[36] For additional problems associated with cargo handling, see USAID (2000).

two years, partially because of automation, and partially due to the reform of regulatory measures concerning customs. Before 2005, customs process alone required 17-32 signatures (if documents are clean); lack of certification for product quality resulted in shipment delays (Burrell and Ghoneim 2004). The main problem that remains untackled is the procedures of the General Organization for Exports and Imports Control (GOEIC) which delay the time of clearance especially when traded goods are subject to inspection by specialized authorities such as the health and agriculture quarantines. Table 6 shows that Egypt still lags behind other main competitors regarding clearance time.[37]

Table 6. Clearance Time Comparison in Selected Countries for Standard Dry Cargo

Country	Sea Cargo LCL	Sea Cargo FCL*
Turkey	1-2 days	1-2 days
United Arab Emirates (Dubai)	1-2 days	1-2 days
Cyprus	2 days	2 days
Singapore	3 days	2-3 days
Jordan	--	12 days
Tunisia	--	12 days
Algeria	--	2 weeks
Egypt	3-4 weeks	2 weeks

* Full Container Loading
--: Not Available
Source: International Exhibition Logistics Associates (IELA) obtained from www.iela.org (visited on 3/7/2007).

4.2.5. High freight costs

The freight fees for inbound shipments are high compared to other destinations in the Mediterranean due to a number of factors. Increasing containerization rate can help bring freight costs down significantly (European Commission 2005). However, containerization in Egypt's total cargo trade is low at 27 percent of imports and 36 percent of exports (35 percent of total cargo handled) (World Bank 1998a; Al Tony 2005; European Commission 2005). Some experts asserted that the containerization ratio has recently increased reaching 40-45 percent of total cargo handled.[38] This stands in contrast to the international rate of containerization, which has reached 80 percent. The level of

[37] It is worth noting that figures of clearance time differ extensively among different sources. The main reason for such differences is the perception of the interviewer, which is based on the type of commodity handled, port and the methodology used in calculating the average.

[38] A communication with Dr. Ismail Mobarek.

containerization in Egypt remains low for three main reasons. First, the average dwell time for containers is quite long as highlighted above, hence affecting negatively the speed of movement of containers, which shipping lines view as a loss that translates into higher shipping costs. Second, there exists very few centers for containerization in Egypt (seven in total) which are not evenly geographically distributed. Third, as imports generally exceed exports by a significant margin, from 60 percent to 70 percent of import containers are returned to vessels empty (Essawy and Ghoneim 2005). The importer, if returning an empty container, often pays additional charges including trucking to the port as well as shipping costs passed on by the vessel carrier. The export of empty containers from Egypt is a major problem adversely affecting the cost of imported goods. Table 7 provides some figures on freight costs from Egypt to different destinations.

Table 7. Freight Costs from Egyptian Ports to Different Destinations (2001-2003)

Year	**2001**		**2002**		**2003**	
Container	20’	40’	20’	40’	20’	40’
Beirut	$225	$400	$150	$300	$150	$300
Hong Kong	N.A.	N.A.	$400	$550	$325	$550
Rotterdam	Dm 120	Dm 250	Eur 175	Eur 200	Eur 100	Eur 300
New York	N.A.	N.A.	$ 1700	$ 2225	$ 1825	$ 1900

Source: Ghoneim (2004).

4.2.6. Inefficient utilization of dry ports

The utilization of dry ports is inefficient. To illustrate, a consignment destined for a dry port often passes through a preliminary inspection at the port of arrival, hence the container is opened and a preliminary evaluation of duties is set by customs. Customs authorities at the bonded warehouse cannot set a duty less than the one set at the preliminary evaluation, even if proven to be higher than the norm. In fact, dry ports act as customs bonded warehouses where the case of preliminary evaluation and the possibility of a pre-inspection of a consignment at seaports imply that dry ports are not used as ports but as customs bonded warehouses.

4.2.7. Modest level of automation and electronic data exchange

The level of automation is modest in Egyptian ports but is improving significantly. Container terminals in the ports of Alexandria, El-Dekheila, Port Said and El-Sokhna

have been automated with state of the art software for container terminal operations. Although such automation plans are progressing at a fast pace, companies have not declared any plans to install and use Electronic Data Interchange (EDI). Currently there is no communication between ships and the container terminal prior to arrival except in three ports (Alexandria, El-Dekheila and El-Sokhna). Hence, there is no exchange of loading and unloading plans between the terminal and ships, which could have saved time and reduced costs (Burrell and Ghoneim 2004; private communication with a former head of a port authority). El-Sokhna port uses EDI and requires that all shipping agents, logistics providers and clearance agents who deal with the port use EDI. Applying EDI is likely to face several obstacles in implementation at the beginning of its introduction due to the cultural and organizational complexity[39] at the port authorities and other activities.

To summarize, the lack of a conducive regulatory framework that enhances the participation of the private sector in maritime and related logistics services when combined with the problems associated with ports infrastructure identified above have resulted in several negative consequences including: relatively high freight costs, low level of containerization, high costs of cargo handling, inefficient stevedoring activities, inefficient use of dry ports, and cumbersome clearance procedures. All such features of inefficient maritime and logistics services have resulted in delays in clearing goods. The frequent delays in goods clearance implied that importers had to hold excessively large inventories due to the possibility of input supply disruptions (Cunningham 2002). Holding large inventories leads to additional costs to traders and manufacturers which reduce their competitiveness and raise the prices of traded goods with negative implications for consumers as well.

In addition, inefficient port services have resulted in less shipping lines calling at Egyptian ports. Less frequent shipping lines cause delays and raise the transport risks for traders (USAID 1996). Moreover, inefficiency of port services implies losses to the firms working in ports. Given the fact that there is a great majority of firms that are government owned, the government is incurring extra costs. The inefficiency of ports and port

[39] Associated with computer illiteracy combined with abundant labor, and lack of full coordination among customs authorities, port authorities and other agencies and authorities in the port.

services led to foregone income that could have been generated to the economy in general in terms of increased transshipment trade where Egyptian ports enjoy a geographical comparative advantage. Thus, improving maritime and logistics services could have a significant impact on enhancing foreign direct investment (FDI) and creating jobs in the Egyptian economy.

5. MULTIMODAL OPERATIONS IN EGYPT

Contrary to conventional wisdom that multimodal operations do not exist in Egypt, there are several cases, which prove the opposite. It is true that the majority of trade flows does not experience a well-structured multimodal model, there is however a number of trade commodities, which depend on the multimodal system existing in Egypt. El-Sokhna port represents an example of multimodal transport. This port was designed as argued before to act as a container port, handling containers coming from Asia and Europe, which saves time (approx. 15 hours) and costs (about 100,000 USD per ship on average) for the vessels that would have otherwise had to pass through the Suez Canal. A rail line is foreseen for container train shuttles linking El-Sokhna to Cairo and the Delta and possibly towards Damietta or Port Said (MEDAmos 2006).

Egypt has approximately a dozen large and experienced freight forwarders offering a variety of transport and logistics services, as well as many medium and small sized forwarding companies. Established forwarders, such as Egytrans, Delta Express and Speditrans are authorized to issue a multimodal transport bill of lading (also known as house bill of lading) through affiliation with FIATA (Fédération Internationale des Associations de Transitaires et Assimilés or International Federation of Freight Forwarders Associations based in Vienna, Austria). Less established forwarders serve as clearing agents, providing services to importers and exporters in the clearance of inbound and outbound cargo through cross-border formalities at the port (Devlin and Yee 2002). Multimodal operations could help enhance the efficiency of transport in Egypt, however they face various constraints.

5.1. Lack of Multimodal Operators

Egypt lacks Multimodal Transport Operators (MTOs) who act as principals and assume responsibility for the execution of the contract. MTOs, therefore, as principals and not as agents or on behalf of the consignor or of the carriers participating in the transport, conclude contracts covering more than one mode of transport, regardless of who actually performs the transport. Multimodal transport therefore implies that a transport operator is capable of controlling the entire door-to-door transport operation, as well as of assessing and preventing inherent risks related to such an operation (risk-management capability) (UNCTAD 2003).

5.2. Lack of a Legal Framework for the Liability of Multimodal Carriers

There is no standard legal framework for liability and insurance of multimodal carriers. The insufficient carrier liability insurance (particularly for trucks) poses additional costs when faulty equipment leads to damage or loss of cargo and there is no compensation for the trader, which undermines confidence in services provided by the trucking industry and impedes trade. Lack of harmony in the liability regimes among the different modes of transport and in some cases insufficient coverage for each mode to cover the full value of the cargo, creates uncertainty in multimodal transport as well as complication for the shipper in providing adequate insurance to cover the value of the cargo, should the limits of liability be too low (Devlin and Yee 2002). As a result, liability items are still negotiated, on a case by case basis, in contracts between various parties involved in the door-to-door trips. This lack of standardization results in different interpretations of contracts and creates several legal problems associated with uncertainty (European Commission 2005).

5.3. Low Containerization Rates

Multimodal operations are negatively affected by low containerization rates in Egypt as argued above. Since its introduction in the 1960s, containerization has rapidly taken over the market of international trade. Starting 1985, global trade container moves have grown sevenfold (UNCTAD 2005; Haiba 2007). To date, most goods are carried in containers

irrespective of the mode of transport, their variation and multiplicity; hence, containerization facilitates trade by using multimodal transport (UNCTAD 2003).

5.4. Complex and Lengthy Customs Procedures

Multimodal operations are likewise hampered in Egypt due to customs rules and regulations. For customs in Egypt, transit shipments are classified into two categories: direct transit and indirect transit. Direct transit refers to the situation where the cargo that is unloaded in the port remains in the same terminal of the port to be loaded again and shipped. Indirect transit refers to the cargo that is unloaded and is to remain in warehouses in the same port or transported to another port or customs bonded warehouse in order to be released to the local importer using one mode of transportation. This is due to the fact that the customs authority requires that the value of the cargo be covered by a letter of guarantee and linked to only one mode of transport. If the cargo is to change modes, then another letter of guarantee is to be issued. This would lead to extra costs and extra loss of time. This situation overrides the principal aim of multimodal transport, which is to move goods to its destination on time, in good condition, and at as low a price as possible.

Hence, in Egypt, the multimodal transport, meaning that a cargo can be unloaded in a port then transferred to another port and shipped outside the country, falls outside the definition. This situation causes problems, especially during the transfer of cargo from one mode to another and the procedures involved. Most of the transportation from and to the ports is done by road although there is a railway network linking all seaports but it is underutilized as the procedures are very complex and lengthy, and very few logistics providers and shipping lines use the railways. To move transit goods from port to port through the railway network requires lengthy procedures and many employees to deal with the Egyptian Railway Authority and Customs authorities, a situation which prevents many from using the railways, which are known to be less costly and safer than using road transport.

Another problem is that “dry ports or inland container depots” do not exist in the laws governing the transport sector; hence, the only available inland depots are customs

bonded warehouses. This situation initiates a dilemma during the movement of the shipments and adds to the costs of their handling.

5.5. Weak Road, Railway and River Ports Infrastructure

The weak roads, railway and river ports infrastructure implies that the building blocks of multimodal transport are not ready to allow enforcing an efficient multimodal system. For example, in the case of *roads*, trucks suffer from weak maintenance, overloading, old age, high prices and inefficient services. More than one third of the road fleet is owned by fragmented small firms whereas the rest is owned by cooperatives or public firms. The market structure prevailing implies an inefficient system where quality is not considered. As a result, a large number of producing firms became dependent on their own fleets (37 percent of the existing road fleet is owned by production firms). In addition, there are no trucks specialized in containers' transport (Al Tony 2005). Instead, trucks use a modified flat bed truck that has additional pieces of metal welded to the bed of the trailer to accommodate carrying a container (Burrell and Ghoneim 2004), which is an unsafe and inefficient method. In the case of *railways*, the lack of comprehensive adoption of the concept of dry ports led to thinner traffic, which when accompanied by modest investments from the Egyptian National Railway (ENR) Authority implied inefficient railway system for freight transport. The amount of freight carried by railway does not exceed eight percent of total domestic freight (Al Tony 2005; Burrell and Ghoneim 2004).[40] *River transport* suffers as well from insufficient investments where the number of cargo ports established by the government is only three (in addition, there are 43 private ports established by firms); hence domestic freight carried through river transport does not exceed four percent[41] of total domestic freight (Al Tony 2005). It is worth noting that Egypt does not follow international norms in using the different modes of transport. All over the world trucks are the most expensive means of transport (and thus the least used), whereas river and railways are less expensive (and thus the most used). In Egypt,

[40] Some experts assert that 97.5 percent of domestically transported cargo use trucks whereas only 2.5 percent use railway (Dr. Ismail Mobarek in a private communication).

[41] The minister of transport announced that only 0.8 percent of Egyptian freight use the river (see German Arab Trade 2007).

due to the absence of a reliable railway network and efficient river transport means, trucks or rather road transport is the highly used means of transport.

6. Proposals for Reforming Maritime Transport and Related Logistics Services

The analysis of Egypt's maritime transport and related logistics services reveals that the entanglement of ineffective implementation of regulations, lack of competition in logistics services, thinner and unbalanced traffic densities, poor status of other means of transport (road, river and railway), and lack of physical investments are the main culprits behind the inefficient maritime and logistics services in Egypt. The maritime and related logistics services face the dual challenge of national economic reform and adapting to international practices in this field. Such challenges require urgent adoption of a comprehensive strategy addressing the weakness of maritime and logistics sectors. Such comprehensive strategy should have regulatory and policy dimensions.

6.1. Regulatory Dimension

1) Laws and regulations enhancing private sector participation should set a level playing field. It is not expected that private sector participation will increase so long as price setting of port services is manipulated and heavily controlled by the government or is a result of unfair practices among private sector players where the role of regulator is absent. Moreover, private sector participation cannot be enhanced so long as existing governmental public firms and port authorities collude whether in terms of ownership of competing port services firms or in terms of controlling terminals in ports;

2) An independent regulator should be established if Egypt wants to adopt the model of landlord ports. International experience (e.g., Colombia) shows that the regulator needs to have a clear mandate to avoid several unnecessary interventions, which could deter private investments (World Bank 1998b). The regulator should set guidelines for fees and charges of different port activities, ensure that port services are not too expensive, prevent unfair competition and set minimum rates of return for each port;

3) Reform of the customs and associated laws is needed to enhance multimodal transport and correct the concept of dry ports, which currently act as bonded warehouses;

4) The entanglement of jurisdictions should be streamlined where the port authority should have the upper hand on controlling and supervising different services provided within the port. This requires enforcing the laws and regulations that provide heads of port authorities with more control on activities taking place within ports;

5) The financial independence of the Egyptian port authorities will enable them to adopt financial systems in accordance with international standards and measures. Such concepts will enable them to spend budgets timely and effectively in accordance with changes in circumstances.

6.2. Policy Dimension

1) Price setting by governmental decrees should be replaced with a free market system where deregulation of prices should take place taking into consideration the status of services and infrastructure in each port, the prevailing prices in regional competing ports and the contestability of market of different services. A system of setting a price floor in conjunction with a price ceiling should replace the existing system of rigid prices as a transitional system until the environment and circumstances allow full liberalization of prices. This system has been adopted in Colombia and has proved to be a success (World Bank 1998b);

2) Special incentives (as price discounts on services) should be provided for different stakeholders (including terminal operators, warehouses, handling and stevedoring service providers) for the use of containers. The existing regime allows such incentives for vessels carrying transshipment containers. What is needed is expanding the system of incentives for container handling firms and multimodal operators dealing with containers. Increasing the ratio of containerization will help the transshipment trade to flourish. It will also increase revenues for government and acting service providers;

3) Wider use of automation is needed, especially that the use of EDI is likely to enhance FDI and reduce transaction costs associated with different activities in ports. It was estimated that successful implementation of EDI in Egyptian ports could result in increasing yearly revenue by 350 million USD for the Egyptian economy (Cox and Ghoneim 2000). Recent studies reveal that automation is still incomplete in Egyptian ports and that its introduction is likely to result in significant positive developments in terms of facilitating port and customs services including lessening the cargo clearance time (USAID 2006). The GoE can make use of the currently available finance allocated to trade facilitation from international donors to enhance its port automation plans. However, introduction of automation should be balanced against the expected negative impact on labor, i.e., layoffs. A transitional plan should be set to ensure that labor layoffs are undertaken in a smooth way;

4) There is urgent need for upgrading infrastructure of ports. Accompanying trade infrastructure is a prerequisite for competitiveness (Devlin and Yee 2005). New schemes for involving private investments in financing existing and new infrastructure should be designed, especially that the current maritime and logistics regulations have not increased the contributions of private investment significantly. The GoE is currently promoting public private partnerships (PPP) in different fields, especially infrastructure and social services. PPP should be enhanced in the field of maritime services. Moreover, enhancing cooperation with international financial institutions such as the World Bank and bilateral donors as the EU (for example, under the Action Plan of the Neighborhood Policy) in providing concessional loans and grants for upgrading the infrastructure should be encouraged.

5) There is an urgent need to overcome the inconsistency of data available on the maritime and logistics sectors. Data published by official sources in many cases do not reflect the perceptions of different stakeholders (e.g., dwell time estimations) and there is wide unavailability of data and information on different aspects of ports, port services as well as auxiliary services.

Piecemeal reforms in terms of adopting, for example, privatization or liberalization initiatives without adopting the appropriate regulatory framework are not likely to generate positive outcomes. This does not contradict the need to identify priorities and sequence reforms as it is difficult to target all the sub-sectors of maritime and logistics activities across the country. It is rather logical to start tackling the most urgent needs of the sectors based on the specific characteristics of Egypt, which include high concentration of maritime traffic in a small number of ports (namely, Alexandria, Port Said, Damietta and El-Sokhna); and the high geographical concentration of trade with the European Union (Mueller-Jentsch 2003). Hence, reforms and investments should focus on a network of priority ports and related network of roads and railroads. In other words, reforms of maritime and related logistics services can be efficiently pursued only if the accompanying pillars of multimodal transport are upgraded simultaneously. Expected outcomes are unlikely without changing the overall regulatory framework governing multimodal transport and ensuring that accompanying laws and regulations allow effective participation of the private sector. The same applies to GATS commitments, which have allowed foreign participation in sectors of passenger and freight international maritime transport, as well as ports dredging but have remained ineffective partially due to the unfair rules of the game adopted on the ground (though consistent with the GATS).

Several issues related to privatization should be taken into consideration to ensure a positive outcome of this process. Increasing concentration in the market for port services has increased the risk that private firms may capture the benefits of government reforms (World Bank 2004). International experience shows that privatization of ports has faced problems including withdrawals of operators (Argentina), perceived unfair competition (Argentina), delays (Chile), labor unrests (Brazil) and complete failures (Uruguay) (Hoffmann 2001). Privatization should avoid possibilities of private monopolies. Common user and service ports (which are the port systems currently prevailing in Egypt) might need to be divided into competing terminals to increase inter-port competition, along with intra-port competition. Mergers between companies operating such terminals should be reviewed and an aggressive adoption of competition policies needs to be invoked. This should be one of the main roles of the regulator of the sector, especially that the Egyptian competition law does not include a provision for merger

review (whether ex-ante or ex-post). Laying off redundant labor in ports and port services companies should be coupled with social safety net programs, retraining programs and job search assistance.

GATS commitments can help anchor domestic reforms undertaken. However, the failure of Egyptian shipping industry to attract FDI implies that the GATS commitments alone are not sufficient. Moreover, the international maritime passenger and freight transport, which have been free from restrictions, or rather liberal in trade terminology, have ended up in a high concentration of shipping lines carrying Egyptian trade as identified earlier. This implies that trade liberalization alone cannot generate positive results. It must be accompanied by an efficient regulatory framework that ensures fair competition.

Finally, the reform of maritime and related logistics services has positive environmental spillovers, hence enhancing sustainable development. The poor status of infrastructure and vessels coupled with the absence of well-enforced regulatory framework could have serious environmental negative effects. All reforms undertaken should emphasize such developmental aspects, not only to comply with Egyptian laws and regulations in theory but also to ensure their application in practice.

Annex 1. Core Freight Logistics: Definitions According to UN Central Product Classification

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 and tourism development consulting services.

***** The United Nations Provisional Central Product Classification (UNCPC) 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.
Source: UNCTAD (2006c).

Annex 2. 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 behavior, 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.

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.

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)

c. Rental of commercial vehicles with 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:

Non-Core Freight Logistics Services

Computer and Related Services.

Packaging Services.

Management Consulting and Related Services.

Source: UNCTAD (2006c).

Annex 3. Egypt GATS Commitments in the Field of Maritime

Modes of supply: (1) Cross-border supply (2) Consumption abroad (3) Commercial presence (4) Presence of natural persons

Sector or Sub-sector	Limitations on Market Access	Limitations on National Treatment	Additional Commitments
I. HORIZONTAL COMMITMENTS			
ALL SECTORS INCLUDED IN THIS SCHEDULE	3) None	3) Acquisition of land: -Authorization is required for the acquisition of land and/or real estate property. Applications in this respect are considered on the basis of the evaluation of the specific projects for which the acquisition is requested and in accordance with the national policy objectives. -Acquisition of land and/or real estate property in free zone areas is unbound.	
	4) The entry and temporary stay of natural persons -According to the labour code (Law No. 137/1981) and its executive regulations, the number of foreign personnel necessary to the supply of services in any entity, regardless of number of its branches, shall not exceed 10 per cent of the total number of personnel employed therein, unless otherwise specified in a sectoral entry of this schedule.	4) None	

Modes of supply: (1) Cross-border supply (2) Consumption abroad (3) Commercial presence (4) Presence of natural persons

Sector or Sub-sector	Limitations on Market Access	Limitations on National Treatment	Additional Commitments
11. TRANSPORT SERVICES			
A. International Maritime Transport	1) Unbound 2) Unbound 3) Commercial Presence is only allowed for joint-venture companies. -Foreign capital equity should not exceed 49 per cent; -All ships owned by the established companies should be registered at the Egyptian ship register as a pre-requisite to fly the Egyptian flag	1) Unbound 2) None 3) None	
(a) Passenger Transportation			
(b) Freight Transportation	4) 95 per cent of the crew should be national and their wages and salaries should not be less than 90 per cent of the total paid up wages and salaries -The Chairman and majority of the Board of Directors must be Nationals	4) None	
(f) Supporting services for Maritime Transport: Port dredging	1) Unbound* 2) Unbound 3) Commercial Presence is only allowed for joint-venture companies. -Foreign capital equity should not exceed 75 per cent 4) At least 25 per cent of both the personnel and members of the Board of Directors must be Nationals	1) Unbound* 2) Unbound 3) None 4) None	

Source: Ministry of Trade and Industry, Trade Agreements Sector, obtained from www.tas.gov.eg (visited on 11/9/2007).

REFERENCES

Al Tony, Fathy. 2005. Transport cargo services and their impact on the competitiveness of Egyptian exports. *Egyptian Review of Development and Planning*, 13 (1), Institute of National Planning, June.

Andriamananjara, Somiely. 2001. *Trade and international transport services: An analytical framework.* USITC, Office of Economics Working Paper No. 2001– 11–A. Washington D.C.: U.S. International Trade Commission.

Burrell, David and Ahmed F. Ghoneim. 2004. *Overview of trade facilitation in Egypt*. Report submitted to USAID, Cairo.

Central Bank of Egypt. 2007. database, Feb.

Cox, Benita and Sherine Ghoneim. 2000. *Electronic data interchange (EDI) and trade facilitation: Best practice and lessons from experience*. Proceedings from the 2nd Mediterranean Development Forum, September 1998, Marrakech, Morocco.

Craig, Geoffrey. 2007. Alexandria port shines after renovation. *Business Monthly*, the Journal of the American Chamber of Commerce in Egypt, July.

Cunningham, Bert. 2002. *Activity Approval Document Customs and Trade Facilitation Reform Activity*. Cairo: USAID.

Devlin J. and Peter Yee. 2002. *Global links to regional networks: Trade logistics in MENA countries.* Paper presented at the Fourth Annual Mediterranean Development Forum Held in Amman, 6 – 9 October, 2002.

———. 2005. Trade logistics in developing countries: The case of Middle East and North Africa. *World Economy* 28 (3): 435 – 456.

Essawy, Amr and Ahmed F. Ghoneim. 2005. Trade facilitation and the integration of Egyptian manufacturers in world trade with special emphasis on port efficiency, in *Revisiting Egypt's competitiveness: The road ahead for building leading sectors*. Nassar, Heba.

European Commission. 2005. *Blue Paper: Towards an integrated Euro–Mediterranean transport system, transport policies and priorities commonly agreed by MEDA partners*. Euro Med Transport Project.

Fink, Carsten, Aaditya Mattoo, and Cristina Negau. 2002. Trade in international maritime service: How much does policy matter? *World Bank Economic Review* 16 (1): 81–108.

François, Jospeh and Ian Wooton. 2000. *Trade in international transport services.* Tinbergen Institute Discussion Paper No. TI 2000– 057/2.

General Authority for Investment and Free Zones. 2007. Online Database.

German Arab Trade (GAT). 2007. Transportation in Egypt. *The Magazine of the German Arab Chamber of Industry and Commerce*, May/June 2007– 58 (3) www.ahkmena.com.

Ghoneim, Ahmed F. 2004. Unpublished report on trade in services submitted to the World Bank.

Haiba, Mahmoud Sami. 2007. *Towards the application of an efficient multimodal transport system in Egypt*. Paper presented at the 23rd International Port Conference Port Technology, Alexandria: 18 – 20 February.

Hoffmann, Jan. 2001. Latin American ports: Results and determinants of private sector participation. *International Journal of Maritime Economics* 2001(3): 221– 241.

International Exhibition Logistics Associates (IELA) obtained from www.iela.org.

MEDAmos (Mediterranean Motorways of the Sea). 2006. *Country Report Review*.

Ministry of Economic Development. 2007a. Ministry of Economic Development Database.

Ministry of Economic Development. 2007b. *The five year plan for social and economic development* (2007/2008–2011/2012) and its first year (2007/2008).

Ministry of Transport, Maritime Transport Sector. 2004. *Egyptian Ports Bulletin, Eleventh Edition*. March 2004. Egypt: Egyptian Maritime Data Bank.

Ministry of Transport, Maritime Transport Sector. 2005. *Statistical Yearbook*. Egypt: Egyptian Maritime Data Bank.

Ministry of Transport, Maritime Transport Sector. 2006a. *Statistical Yearbook 2005*. Alexandria, Egypt: Egyptian Maritime Data Bank.

Ministry of Transport, Maritime Transport Sector. 2006b. *Maritime ports guide (commercial and specialized).* Alexandria, Egypt: Egyptian Maritime Data Bank.

Mobarek, Ismail. 2007. *Egyptian ports development and efficiency enhancement.* Paper presented at the 23rd International Port Conference Port Technology, Alexandria: 18 – 20 February.

Mueller-Jentsch, Daniel. 2003. *Transport sector reform and deeper economic integration in the Euro-Mediterranean region*. ERF Working Paper No. 0308. Cairo, Egypt: Economic Research Forum for Arab Countries, Iran, and Turkey.

National Democratic Party (NDP). 2006. *Policies of transport services and citizens' safety*. The Fourth Annual Conference. Cairo, Egypt: NDP.

UNCTAD. 2003. Development of multimodal transport and logistics services. UNCTAD Doc. Nr. TD/B/COM.3/EM.20/2.

———. 2004. *Review of maritime transport 2004*. Geneva: UNCTAD.

———. 2005. *Review of maritime transport 2005*. Geneva: UNCTAD

———. 2006. Online database.

———. 2006a. Negotiations on transport and logistics services: Issues to consider. Document No. UNCTAD/SDTE/TLB/2005/3. Geneva: UNCTAD.

———. 2006b. *Review of maritime transport 2006*. Geneva: UNCTAD.

———. 2006c. Trade and development aspects of logistics services. Document No. UNCTAD/ TD/B.COM.1/AHM.1/2, Geneva: UNCTAD.

USAID. 1996. Egypt: Options for increasing market competition in maritime port services. Development economic policy reform analysis. Project prepared for the Government of Egypt.

———. 2000. Egypt and the GATT/WTO customs valuation agreement. Report prepared for the Ministry of Finance and the Ministry of Economy and Foreign Trade, Egypt.

———. 2006. Monitoring and reducing the time of release of Egyptian imports April 2004–April 2006. Cairo: Nathan Associates.

World Bank. 1997. "*Egypt Port Sector Report*". Preliminary draft report submitted to the Ministry of Transport, Communications.

———. 1998a. Project appraisal document on a proposed learning and innovation credit in the amount of 2.00 Million USD equivalent to the Arab Republic of Egypt for the port sector reform, report No. 17773– EGT.

———. 1998b. *Port privatization and competition in Colombia*. Viewpoint Note No. 167, December 1998, Washington D.C.: World Bank.

———. 2004. Reducing trading costs in a new era of security. *Global Economic Prospects* 2004.

World Economic Forum. 2007. *The Global Competitiveness Report 2006–2007.*

World Trade Organization. 2001. *Maritime transport services*. Background Note by the WTO Secretariat, S/CSS/W/106, 2001.

Ximena Clark, David Dollar, and Alejandro Micco. 2002. *Maritime transport costs and port efficiency*. Policy Research Working Paper No. 2781. Washington, D.C.: World Bank.