

**Economic and Social Commission for Western Asia (ESCWA)**

Committee on Transport and Logistics
Nineteenth session
Beirut, 26-28 November 2018



Item 7 of the provisional agenda

**Maritime transport in the Arab region:
does liberalization matter?****Summary**

Maritime transport is the most important mode of international transport of goods. However, it remains the most restricted sector due to its economic, political and security importance. While the General Agreement on Trade in Services (GATS) has led to liberalization in many other sectors, maritime transport has not seen much benefit under it. This may change with a new generation of regional trade agreements which focus on trade in services and could induce some changes in the sector's regulatory frameworks, including significant moves towards liberalization.

The maritime transport sector is more restricted in the Arab region than in others. Further liberalization and deregulation at the regional level could bring some gains on various fronts, including boosting regional integration and improving maritime transport and trade networks.

CONTENTS

	<i>Paragraphs</i>	<i>Page</i>
Introduction	1-5	3
<i>Chapter</i>		
I. REGULATION OF MARITIME TRANSPORT.....	6-14	3
II. LIBERALIZATION OF THE MARITIME TRANSPORT SECTOR IN THE ARAB REGION	15-18	7
III. SCOPE OF MARITIME TRANSPORT IN TRADE AGREEMENTS.....	19-34	8
A. The GATS	21-23	8
B. The TiSA	24-29	10
C. The PASTA	30-32	11
D. The GCC Agreement	33	11
E. The COMESA	34	11
IV. OPPORTUNITIES AND CHALLENGES FACING MARITIME TRANSPORT IN THE ARAB REGION.....	35-40	11
V. CONCLUSION AND RECOMMENDATIONS	41-44	13

Introduction

1. Maritime transport has been growing steadily over the past decades and remains the most important mode of transport for international trade. With 80 per cent of the volume and 70 per cent of the value of international trade across the globe carried on ships, maritime transport provides economies of scale and is the least expensive means of transporting goods among all modes of transportation. Maritime transport and its related services make up about 10 per cent of global trade in services and have had an average growth rate of about 3 per cent over the past four decades.¹ By 2030 the demand for global freight is expected to grow by 70 per cent, further increasing the pressure for faster and more efficient transport services.²

2. How maritime transport and the related services are regulated is an important factor in the sector's development and efficiency. Appropriately targeted regulations can pave the way for better competition among transport service providers, leading to better services, lower prices, and improved accountability and reliability. These improvements, in turn, would lead to more and healthier economic competition in the sector. Proper regulation can also encourage foreign direct investment both in the transport infrastructure and the transport services.

3. Given its importance in a country's sovereignty, national security and political and economic stability, the maritime transport sector continues to be one of the most regulated service sectors. In practice, however, the sector is subjected to varying degrees of regulation. Despite its critical role in international trade, the maritime transport sector has not been subject to significant regional or global efforts of liberalization.

4. Liberalization of maritime transport has not been addressed by the major international maritime transport agreements, which have focused primarily on the operational aspects of the sector. The 1995 General Agreement on Trade and Services (GATS)³ of the World Trade Organization (WTO) was the first international agreement providing legally enforceable rules on trade services that included maritime transport services as part of the whole services sector. However, until now GATS has not had significant results leaving large scope for further liberalization of the sector, especially in the light of technological developments and innovations that have impacted all services.

5. This document discusses the levels of regulation and openness of the maritime transport sector in the Arab region. It also reviews the various trade policy tools that could be applied to liberalize the sector at the regional and global levels.

I. REGULATION OF MARITIME TRANSPORT

6. The maritime transport sector is governed both by a public system and the private sector freight market system. The sector is influenced by the capital markets, labour markets and global freight markets in which it operates, and the regulatory frameworks of these markets shape in turn the processes of the maritime transport sector.⁴ It is also inextricably linked to the logistics supply chain, customs and border management and security management systems. As such, the maritime transport sector is shaped not only by its own governance rules, but by other sectors' rules as well.

¹ UNCTAD/RMT/2017.

² Sustainable Mobility for All Initiative, *Global Mobility Report, 2017*. Available at <https://sum4all.org/publications/global-mobility-report-2017>.

³ Available at https://www.wto.org/english/docs_e/legal_e/26-gats_01_e.htm.

⁴ A.S. Grzelakowski, "International maritime transport sectors regulation systems and their impact on world shipping and global trade", *TransNav International Journal on Marine Navigation and Safety of Sea Transportation*, vol. 7, No. 3 (September 2013).

Box 1. Regulation of maritime transport

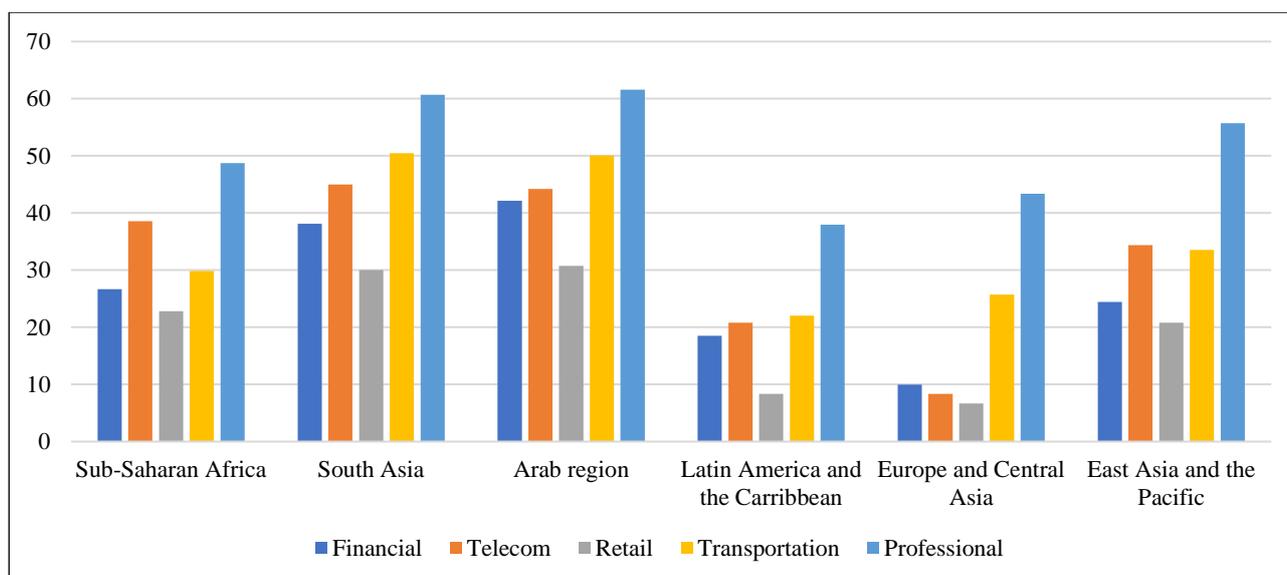
Protectionist shipping policies can be divided broadly into political and economic ones, both of which ultimately aim to improve national prosperity. The immediate goals of politically oriented shipping policies are linked to securing national security or standing. Economically oriented ones are designed to boost national economic interests by improving balance of payments, national incomes, employment, foreign trade interests and a country’s national merchant fleet. Although the immediate goals of political and economic shipping policies are quite different, the policy tools applied are basically the same and amount to flag discrimination practices (which give preferential treatment of a country’s cargo shipping) on the one hand and fiscal support measures on the other.

While developed countries have tended to intervene in the shipping market for political purposes and have assisted their domestic shipping industries in various forms, they have generally pursued open policies for international shipping. Developing countries’ maritime transport policies have largely been motivated by economic objectives and have been regarded as a tool to develop the national economy. This is why “closed-door policies”, especially with regard to international shipping, are seen in many developing countries where various policies, such as cargo reservation schemes and other so-called hardline measures, have been and continue to be applied.

Source: Benjamin Parameswaran, *The Liberalization of Maritime Transport Services: With Special Reference to the WTO/GATS Framework* (Berlin, New York, Springer, 2004).

7. Viewed globally, transport seems to be more restrictive than many other service industries including financial services, telecommunications and retail services (figure 1). This is due to the political and security sensitivity of the sector which has led to more conservative policies across most countries.

Figure 1. Services Trade Restrictiveness Index, selected regions



Source: World Bank, Services Trade Restrictions database.

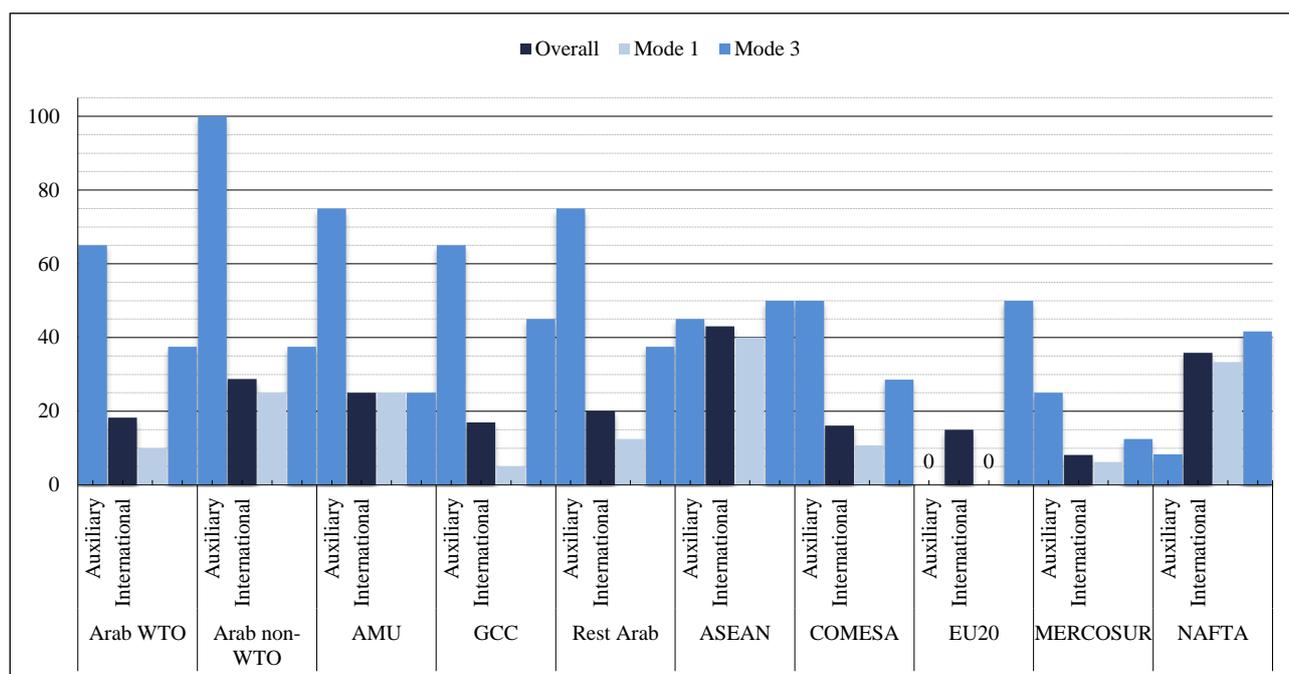
Note: The professional category includes sectors such as legal services, health care services and accountancy.

8. International shipping tends to be fairly open although with varying degrees between bulk shipping and liner shipping, while auxiliary services such as cargo handling and freight forwarding are more restricted. Cabotage, the onward transport of goods between ports in one country, is strictly closed in most countries.

9. Compared with the world average and other regions, the Arab region has more restrictive policies and regulations for transport services in general (figure 2), while international maritime transport services remain largely in line with the world average in terms of regulation. The adoption of highly restrictive policies and

regulations in the sector has been driven by efforts to establish presence in auxiliary maritime services in Arab countries, such as cargo handling, customs clearance, freight forwarding and storage and warehousing services. Gulf Cooperation Council (GCC) countries tend to be more closed to foreign direct investment (FDI) in international maritime services, while countries of the Arab Maghreb Union (AMU) are fairly open. The cross-border trade of international maritime shipping services tends to be less restrictive in the Arab region and elsewhere when compared with establishing commercial presence, except for the Association of Southeast Asian Nations (ASEAN) and the North American Free Trade Area (NAFTA), where cross-border trade is almost as restrictive as FDI.⁵

Figure 2. Transport Services Trade Restrictiveness Index, selected blocs



Abbreviations: Rest Arab, rest of Arab countries; COMESA, Common Market for Eastern and Southern Africa; EU20, European Union with 20 member States (an artificial category created for the purposes of the Index); MERCOSUR, Southern Common Market.

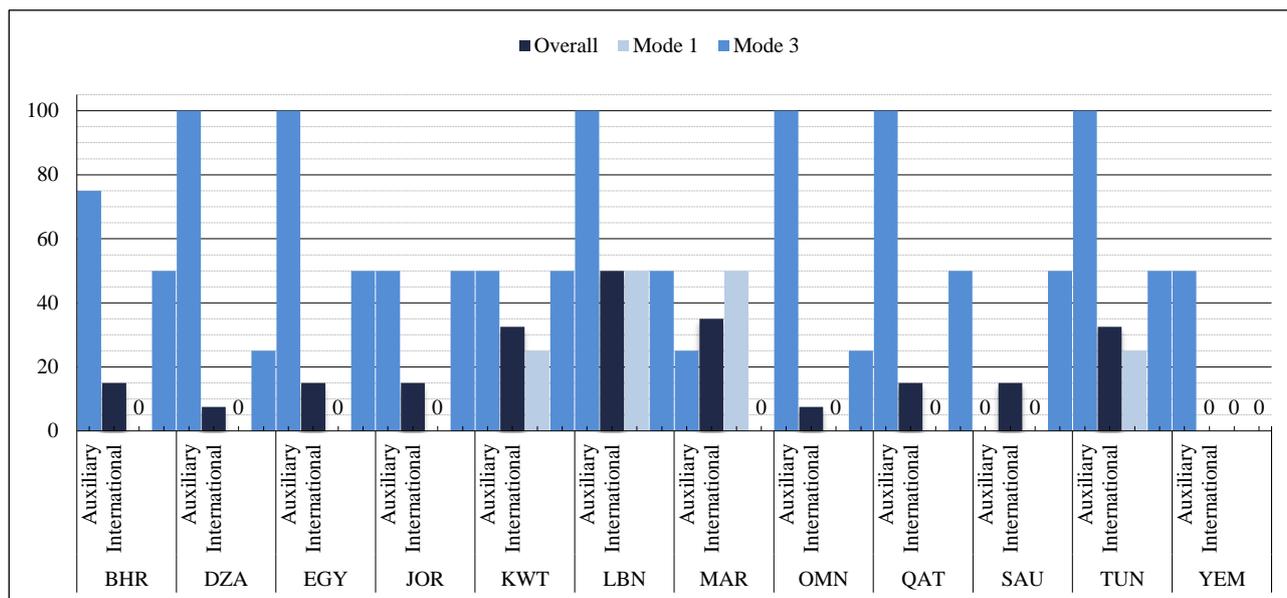
Source: ESCWA, *Assessing Arab Economic Integration: Trade in Services as a Driver of Growth and Development* (Beirut, [E/ESCWA/EDID/2017/6](#), 2018).

10. On the scale of trade openness, Algeria, Egypt, Lebanon, Oman, Qatar and Tunisia have a completely closed, meaning restricted to outside investment, maritime auxiliary services sector; Jordan, Kuwait and Yemen are semi-open; Morocco is on the relatively open end of the spectrum and Saudi Arabia has a fully open maritime auxiliary services sector.

11. In international maritime shipping services trade, Yemen is the only Arab country with fully liberal policies and regulations. Algeria, Bahrain, Jordan, Oman, Qatar and Saudi Arabia are fairly open in that area, though in the majority of these countries, FDI policies in the sector are somewhat restrictive. Lebanon, Morocco and Tunisia, however, have more closed policy regimes in the sector driven by their restrictive FDI policies, with the exception of Morocco which is virtually open to FDI in international maritime shipping.

⁵ Under GATS, international trade in services is supplied and consumed in four modes. Mode 1: cross-border trade in which the services are supplied between countries; mode 2: consumption abroad in which the consumer moves to consume services in another country; mode 3: commercial presence in which the provider of services establishes an outlet to supply the services in another country; and mode 4: movement of natural persons in which people move to countries to supply certain services.

Figure 3. Transport Services Trade Restrictiveness Index, selected Arab countries



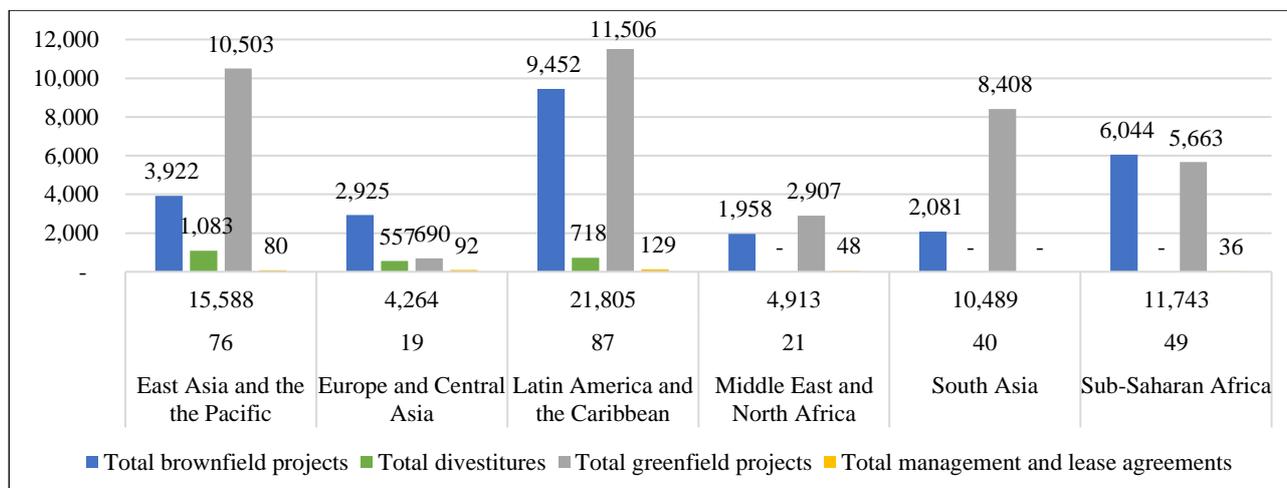
Source: ESCWA, *Assessing Arab Economic Integration: Trade in Services as a Driver of Growth and Development*.

Note: Countries are referred to with the corresponding ISO codes.

12. The level of private sector participation is an indicator of the openness of a sector. Public-private partnership (PPP) can be an effective driver in developing the transport sector. Additionally, private sector participation in infrastructure development and management of services provision can be crucial for efficiency and effectiveness, for one, by freeing up public resources which can be used in other development areas. Attracting the private sector to invest in infrastructure requires a set of policies which includes sound regulatory conditions as well as adequate financial mechanisms, such as loan facilities and government grants.

13. Despite a major shift in the operation of maritime shipping from public to private sector in the recent decades elsewhere in the world, private sector participation in port development and management remains limited in the Arab region. The region is ranked the second lowest in terms of private port management, lease agreements and private participation in port infrastructure investment (figure 4).

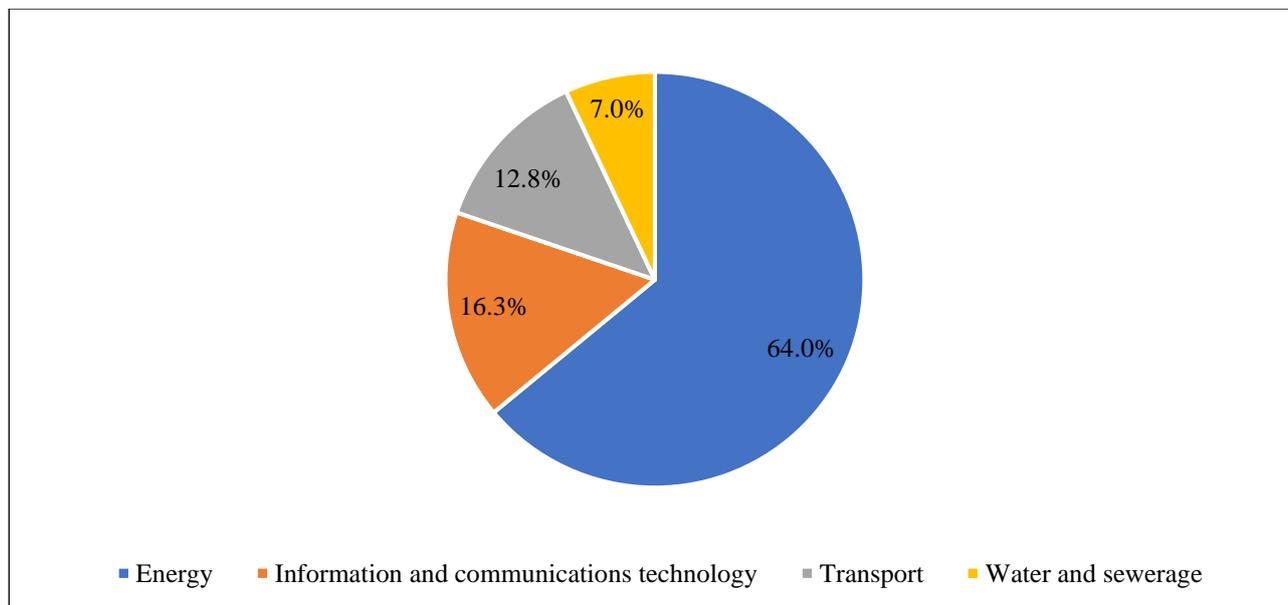
Figure 4. Private participation in port infrastructure investment, 2000-2016
(Millions of dollars)



Source: UNCTAD/RMT/2017.

14. The Arab region's rate of PPP in the transport sector is the second lowest after the water and sewage sectors, as shown in figure 5. The nature of the transport sector, which calls for infrastructure investment, has a long time frame for returns and is highly regulated, renders it less attractive for PPP than sectors such as telecommunications and energy. Additionally, most Arab countries still face constraints, including a fragile political environment, lack of public consensus on the need for PPP, lack of a PPP regulatory framework, unclear division of authority among government agencies and lack of clear dispute settlement mechanisms, which inhibit a flourishing PPP model.⁶

Figure 5. PPP investment in the Arab region, selected sectors, 1990-2017



Source: Data from the World Bank Public-Private Infrastructure Advisory Facility. Available at <https://www.worldbank.org/en/topic/publicprivatepartnerships> (accessed on 1 September 2018).

II. LIBERALIZATION OF THE MARITIME TRANSPORT SECTOR IN THE ARAB REGION

15. Liberalization of trade in services can be a force for enhanced competitiveness and efficiency. Nowadays, regional blocs elsewhere have been engaging more than ever in services trade and cross-borders investment. But the Arab countries have not followed suit.

16. Given the existing low levels of intra-State trade flows in the Arab region, the weak regional transport services sector further harms these countries' export competitiveness power.⁷ Most of the existing trade arrangements among Arab States have focused solely on tariff reduction without addressing services and cross-border investment. Arab States only reached an agreement on liberalization of trade in services in November 2017, with the Pan Arab Services Trade Agreement (PASTA),⁸ but implementation is yet to start.

17. More integration among Arab countries could be sought through regional arrangements and enhanced connectivity, for example by developing hub port trans-shipping systems to other ports in the region. Al Khouri (2000) makes the point that regional liberalization of trade in transport services is "in many ways fundamental to the smooth functioning of regional integration agreements. Thus, instead of postponing the integration of

⁶ E/ESCWA/EDGD/2013/4.

⁷ Riad al Khouri, "Maritime and air transport in MENA, the potential gains from liberalization", Economic Research Forum (ERF) Working Paper, No. 2012 (Giza, ERF, 2000), p. 4.

⁸ See paras. 31-33 of the present document.

the transport services sectors to the later phases of regional integration, it may be more advisable to give this issue a higher priority from the beginning”.⁹

18. There is no direct liner shipping between Arab countries, which plays a key role in driving transport cost up in the region. However, establishing direct regional shipping lines in the region may not be a viable option given the limited trade flow between countries. Enhancing port performance could be a viable alternative step that may lead to more competitiveness and reduction of costs. This could be achieved through liberalization of maritime services in ports at the regional level.¹⁰ Such integration is also foreseen as a step towards empowering the region to withstand the competition coming from outside, such as the Belt and Road Initiative led by China, as well as other developments.

III. SCOPE OF MARITIME TRANSPORT IN TRADE AGREEMENTS

19. The maritime transport industry is one of the few genuinely global industries serving all continents. It is difficult to think of an industry with more international involvement than shipping.¹¹ Yet, the degree of liberalization in the sector is largely limited, especially at the multilateral level. The various agreements on transport have focused solely on the operational aspect of the maritime industry and have not addressed liberalization. The only agreement that has dealt with liberalization of maritime services thus far is the GATS. A new agreement under negotiation, the trade in services agreement (TiSA,) would cover transport services, but in much more depth than the GATS.

20. At the regional level, there have been very few initiatives to liberalize transport services among Arab countries and other blocs that involve some Arab countries. The following is an overview of the current tools which apply for liberalization of maritime transport services.

A. THE GATS

21. Maritime transport is covered by the GATS, which was negotiated during the Uruguay Round and entered into force in 1995. The GATS covers all types of services from telecommunications, financial, professional, business, including health and education services and transportation, among others. Maritime transport, along with financial services and basic telecommunications, were the only sectors whose market-opening negotiations continued after the Uruguay Round was completed.

22. Maritime transport contains many different services ranging from international shipping, to port facilities and internal shipping cabotage. Their diversity renders negotiations a complicated task. Negotiations of maritime services under the umbrella of the WTO have dealt with the three pillars of the maritime transport sector:

(a) International shipping: transporting passengers or freight between ports in different countries;

(b) Auxiliary services: cargo handling, storage and warehousing, freight forwarding, customs clearance services, container-station and depot services. Negotiations deal also with foreign operators' rights to establish their own facilities and supply these services;

(c) Access to and use of port facilities: pilotage, towing and tag assistance, provisioning, garbage collection, port captain's services and anchorage. Negotiations deal with rights of foreign ships to gain access to these services without discrimination.

⁹ Al Khouri, "Maritime and air transport in MENA".

¹⁰ [E/ESCWA/EDID/2016/IG.1/4\(Part II\)](#).

¹¹ Parameswaran, *The Liberalization of Maritime Transport Services*.

23. Although GATS rules generally apply to any service in any sector and therefore to maritime transport services, which are in theory fully covered by the service agreement, the sector is still not subject to the agreement's core liberalization disciplines. Not only has the most favoured nations (MFN) obligation, a basic principle in the context of international service trade liberalization, been temporarily suspended on the basis of the 1996 Decision on negotiations on maritime transport services,¹² it has also not yet been possible to reach a multilateral agreement on the level of specific maritime commitments that member States are willing to make.¹³ The schedule of commitments of most of the WTO members, including the Arab WTO members and many traditional maritime nations, contains either no or little commitments on maritime transport services. Apart from the four States (Jordan, Oman, Saudi Arabia and Yemen) which joined after 1995 and were pushed to undertake deeper commitments than most founding members, Egypt is the only Arab State who joined the WTO before 1995 and made some maritime commitments. The table below shows that, although Egypt made the most commitments among Arab States, its commitments are much less than those of States that acceded after 1995.

ARAB STATES' COMMITMENTS ON MARITIME SERVICES UNDER GATS

Member States	Mode	Limitations on market access	Limitations on national treatment
Egypt	1	Unbound	Unbound
	2	None	None
	3	<ul style="list-style-type: none"> 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 registry as a prerequisite to fly the Egyptian flag. 	None
	4	<ul style="list-style-type: none"> 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 of Egypt. 	None
Jordan	1	<ul style="list-style-type: none"> Liner shipping: none, but all ships docking in Jordan must have a local port agent; Bulk, tramp and other international shipping, including passenger transportation: none. 	None
	2	None	None
	3	<ul style="list-style-type: none"> Establishment of registered company for the purpose of operating a fleet under the national flag of Jordan: none; Other forms of commercial presence for the supply of international maritime transport services: none; Commercial presence in mode 3 is subject to 50 per cent foreign equity limitation. 	Service fees for pilotage, berthing and docking are 10 per cent less for Jordanian ships. Jordanian ships are exempt from any port dues when anchoring in Jordanian territorial waters. Jordanian ships enjoy preferential treatment in prices of bunker provided at the Aqaba Port.

¹² Available at https://www.wto.org/english/tratop_e/serv_e/18-mar_e.htm.

¹³ Parameswaran, *The Liberalization of Maritime Transport Services*.

Member States	Mode	Limitations on market access	Limitations on national treatment
	4	Unbound, except as indicated in horizontal section; ^a 20 per cent of crew on Jordanian ships must be Jordanian.	Unbound, except as indicated in the horizontal section.
Oman	1	None	None
	2	None	None
	3	None	None
	4	Unbound, except as indicated in the horizontal section.	Unbound, except as indicated in the horizontal section.
Saudi Arabia	1	None	None
	2	None	None
	3	None	None
	4	Unbound, except as indicated in the horizontal section.	Unbound, except as indicated in the horizontal section.
Yemen	1	None	None
	2	None	None
	3	None	None
	4	Unbound, except as indicated in the horizontal section.	Unbound, except as indicated in the horizontal section.

Source: Information and data from WTO.

^a The term “horizontal section” refers to the application of the regulations to all sectors, not just maritime trade.

B. THE TiSA

24. The TiSA is currently being negotiated by 23 members¹⁴ of the WTO. Together, the participating countries account for 70 per cent of trade in services worldwide.

25. The TiSA is based on the GATS. The key provisions of the GATS – scope, definitions, market access, national treatment and exemptions – are also found in it. The negotiations are based on proposals made by the participants. The TiSA aims to open up markets and improve rules in areas such as financial services, telecommunications, e-commerce, maritime transport and professionals moving abroad temporarily to provide services, which are the most critical ones for WTO members.

26. The draft agreement contains annexes for each sector, including the maritime services, which outline specific provisions. These sectoral annexes may at some point be integrated into the agreement text as chapters. If adopted, the proposed maritime chapter in the new agreement could potentially be the first ever international legal test for maritime services liberalization.

27. The draft annex on maritime services concentrates on the privatization of maritime transport services in member countries, opening up maritime services industries to transnational companies and contractors. Impacted services would include cargo and passenger transport, cargo handling, storage, warehousing and loading services.

¹⁴ Australia, Canada, Chile, Colombia, Costa Rica, the European Union, Hong Kong (China), Iceland, Israel, Japan, Korea, Liechtenstein, Mauritius, Mexico, New Zealand, Norway, Pakistan, Panama, Peru, Switzerland, Taiwan Province of China, Turkey and the United States of America.

28. The TiSA has been developed to compensate for the generalness of the GATS, a result of the treaty being the first ever trade in services agreement at the global level and the wide scope of services covered. It was also negotiated and concluded prior to the major technological developments that have changed the way of producing and consuming many services. The TiSA aims not only to upgrade the regulation of services internationally to cope with these new developments but also to make up for the vagueness of the GATS on various fronts, considered a shortcoming of the agreement.

29. Even though the TiSA will be a plurilateral agreement once agreed upon, it is likely to be gradually pushed on the WTO membership through subsequent negotiations rounds, similar to other agreements such as the Information Technology Agreement and the Agreement on Government Procurement.

C. THE PASTA

30. The PASTA, the first-ever agreement on services trade among Arab States, was concluded in November 2017. It covers all services including the transport sector and the four modes of supply. It provides a good platform for liberalization of maritime services among Arab countries and could enhance their connectivity and foster trade among them.

31. The signatory States have submitted their schedule of commitments under the PASTA for some services sectors. To date, 8 out of the 10 signatories have made commitments in the maritime transport and auxiliary transport services. Some States made commitments that go beyond their GATS commitments, some matched them and others made less commitments than what they made under the WTO. The true benefit of the PASTA is the commitments that are made by States that are not members of the WTO.

32. However, a real concern is that the level of the commitments made under the PASTA may be less than those offered by Arab States under the ongoing Doha Round of negotiations of the WTO. Thus, if the Doha Round is concluded, the WTO commitments will be stronger than those under the PASTA, superseding it.

D. THE GCC AGREEMENT

33. Members of the GCC are obliged to accord all means of passenger and cargo transportation of any member State while transiting or entering their territories, the same treatment accorded to their national means of transportation, including the level of duties, taxes and facilities. Moreover, GCC member States are obligated to provide maritime transportation of any member State and cargoes thereof the same preferential treatment they grant to their national counterparts in the use of their facilities, whether during docking, while calling at their ports, including fees and taxes, as well as services of pilotage, docking, freight, loading, unloading, maintenance, repair and storage.

E. THE COMESA

34. The COMESA includes four Arab countries. Its mandate is to develop coordinated and complementary transport and communications policies, improve and expand the existing links to further the physical cohesion of member States, facilitate movement of inter-State traffic, and promote greater movement of persons, goods and services within the common market across all modes of transport. In the area of maritime transport, member States agree to promote the coordination and harmonization of their maritime transport policies and the eventual establishment of a common maritime transport policy.

IV. OPPORTUNITIES AND CHALLENGES FACING MARITIME TRANSPORT IN THE ARAB REGION

35. The Arab region's traditional role in international trade throughout history and its strategic location spanning three continents renders maritime transport a strategic and crucial sector for its development and prosperity. Many of the region's countries are racing to become bigger players in maritime services through massive port development and expansion projects. Yet this fierce competition to become a hub for international trade is moving ahead with no complementarity of vision for the region.

36. At the same time, various global developments are expected to have a big impact on the maritime transport sector in the region. The Belt and Road Initiative, which aims to connect China with markets in different parts of the world but particularly in Europe, will potentially shift focus from major sea ports in the Arab region to new ports in the Indian Ocean and the eastern coast of Africa. Likewise, new sailing routes opening through the north Arctic Ocean may shift trade from current routes through the Indian Ocean, the Arabian Sea, the Red Sea, the Suez Canal, the Mediterranean Sea, the Strait of Gibraltar and the North Sea. This would have a negative impact on major city ports in the Arab region such as Dubai, Salalah, Jeddah, Port Said, Tangiers and Beirut.¹⁵

Box 2. Port development in the Arab region

Tremendous investment is pouring into the logistics sector in the Arab region, in both hard and soft infrastructure. While soft infrastructure includes actions such as technology upgrades and enacting legislation, hard infrastructure efforts tend to focus most on building new ports and expanding current ones. Below are some examples.

Morocco is investing heavily in port infrastructure through a strategy of upgrading associated logistics capacities, constructing new facilities such as general cargo ports in Nador and Kenitra and commodity-focused ports in Safi and Jorf Lasfar. The expansion of the Tanger Med 2 will boost capacity to 9 million twenty-foot equivalent units (TEU) per year.

Algeria plans to establish a new port as well as industrial zones in El Hamdania, which will have a capacity of 6.3 million TEU per year by 2021. Additionally, plans to construct new logistics zones in the Port of Djen Djen are being developed with a focus on terminals and logistics operations and the need to outsource logistics operations to increase exports. Furthermore, the port of Djen Djen expressed commitment to the establishment of a “green corridor”, a decrease in charges of handling and lifting by 50 per cent and a reduction of pilotage and towage costs by 75 per cent.

Lebanon is in the second phase of the extension of the Port of Tripoli’s infrastructure and an expansion of the container storage area to 70,000 from 24,000 square metres. Plans to set up an international port in Naqoura, in southern Lebanon, and to expand the main port of Beirut are also underway.

The six GCC countries plan to increase port capacities from 60.2 million TEU per year in 2015 to around 83.6 million TEU by 2020. The plan will increase the region’s capacity of handling TEU by 40 per cent, and Oman and Qatar’s combined port capacity will have grown by 250 per cent to 22 million TEU.

Tunisia is planning a major port expansion. A new deep-water port will be built in the gulf of Hammamet inside the industrial area of Enfidha. The port will have a capacity of 5 million TEUs. It is aimed at reducing the cost of transport by 15 per cent by reducing the transit and other waiting times.

The Jordanian Aqaba Container Terminal Expansion Project was initiated in 2009, allowing for the accommodation of an annual throughput of 1.5 million TEUs, up from 817,000 TEUs. Additionally, Jordan’s Safe Ports Regional Gateway, a port set up as a hub for transport in the Arab region, began to implement its phased expansion in 2018.

Egypt is working on expanding the Damietta Port by building a multipurpose terminal. Expansion of East Port Said port is underway that will result in an increase in commercial container capacity from 4 million to 7 million (and expected to reach 11 million in four years).

The Sudan has made an agreement with Qatar to establish its second biggest port in the northeast region of the country in Suakin, with the aim to twin the port with Hamad port. Suakin is expected to be finalized in 2020.

Source: ESCWA staff compilation, based on various national sources of information and data.

37. Slow economic growth in the region and in key economic partner regions such as China and the European Union are also factors for changes in the maritime industry in the region.

¹⁵ E/ESCWA/30/4.

38. E-commerce is one of the biggest challenges facing the maritime industry. It requires small and fast shipment delivery that only air can fulfil and comes at the account of systematic sea shipped containers and maritime. Technological developments such as blockchain, Internet of Things, big data, robotics, unmanned ships, the emergence of mega ships as well as possible changes of shipping business models, the drastic changes in the energy market and the emergence of new sources of energy replacing oil, are also likely to have a strong impact on maritime transport in the Arab region.

39. The recent decision by the International Maritime Organization (IMO) to reduce by 50 per cent carbon dioxide emissions from ships by 2050 will be challenging for some countries to implement and will have serious implications on the sector. As IMO member States, Arab States will be directly affected by the provisions of the newly adopted strategy. The application of the targets will have short-, medium- and long-term implications on maritime transport in the region. In the short term, it has been well established that the most cost-effective approach to reduce greenhouse gas emissions from the maritime sector is by curbing the ship speed limits.¹⁶ Since the engine power is proportional to the cube of the speed, even small changes in the ship speed would result in notable emissions cuts.

40. In the long term, however, sustainable approaches to decarbonize the maritime transport sector should focus on the development of fuel options that are less carbon-intensive such as biofuels,¹⁷ as well as new marine propulsion technologies.

V. CONCLUSION AND RECOMMENDATIONS

41. The maritime services sector is not only one of the most restricted services sectors in the Arab region, overall it is much more restricted than in other regions. Likewise, the region's maritime transport commitments at the global level under the GATS, and at the regional level under the PASTA, are minimal, reflecting a lack of desire to open the sector for more competition. The conclusion of the PASTA among Arab States is a great opportunity for them to start making progress towards complementarity in their maritime services, especially in the absence of any strong global tool that covers maritime transport. Arab States should attempt to make substantial commitments among themselves under the newly born agreement. Specialization of ports and employing the hub and spoke system are possible strategies to be considered.

42. The challenges facing the maritime sector are ever increasing, in line with the global trends of massive technological developments and other advances. The Arab region is likely to be affected by these global developments, especially the Belt and Road Initiative. Consolidation of positions and capabilities among Arab countries is key to facing the wave of imminent changes and enabling the region's maritime transport sector to compete in the global market.

43. While building more infrastructure may be a great investment, it is not a sufficient measure to improve transport performance and increase its contribution to competitiveness and prosperity. Various other policy and non-policy actions are also needed to optimize the benefit of such investment, including deregulation, increased participation of the private sector, modernization of technological capabilities and removal of different barriers.

44. Finally, innovative financing is an important tool for accelerating infrastructure development and improving performance. Arab States should put in place PPP strategies and legislation to allow for more private sector participation in the development of transport infrastructure.

¹⁶ See Jasper Faber and others, *Regulated Slow Steaming in Maritime Transport: An Assessment of Options, Costs and Benefits* (Delft, CE Delft, 2012), available at <http://www.theicct.org/regulated-slow-steaming-maritime-transport>; and Jun Yuan, Szu Hui Ng and Weng Sut Sou, "Uncertainty quantification of CO₂ emission reduction for maritime shipping", *Energy Policy*, vol. 88 (January 2016), pp. 113-130, available at <http://www.sciencedirect.com/science/article/pii/S0301421515301488>.

¹⁷ Christos Chryssakis and others, "Low carbon shipping towards 2050", Position Paper (Høvik, DNV-GL, 2017). Available at <https://www.dnvgl.com/publications/low-carbon-shipping-towards-2050-93579>.