



## *The reality of maritime freight transport in Algeria*

Adouane Ziane <sup>\*(1)</sup>

[ziane.adouane@univ-bejaia.dz](mailto:ziane.adouane@univ-bejaia.dz)

RMTQ Laboratory

University of Bejaia, (Algeria)

Dr. Bennacer Nasreddine <sup>(2)</sup>

[nasreddine.bennacer@univ-bejaia.dz](mailto:nasreddine.bennacer@univ-bejaia.dz)

Teacher-Researcher

LED Laboratory

University of Bejaia, (Algeria)

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### *Abstract*

This research focuses on the reality of the maritime freight transport in Algeria. In fact, almost all of the country's trade is carried out by sea, which gives a strategic character to the mode of transport by ship and the port infrastructures providing support thereto. Nevertheless, logistical costs, particularly the cost of sea freight, represent a real obstacle to the development of maritime trade in Algeria. Besides, the aim of this paper is to shed light on the main constraints to the development of this sector, whilst proposing also a number of alternatives to alleviate the difficulties encountered by the maritime transport of goods in Algeria. More to the point, we will illustrate, through this research, an overview of the maritime freight transport sector in Algeria together with the main difficulties associated thereof. Likewise, we will examine the strategy implemented by the government for development purpose of this sector.

\*Adouane Ziane : [ziane.adouane@univ-bejaia.dz](mailto:ziane.adouane@univ-bejaia.dz)

As a consequence, the main findings highlight the inadequacy of port logistical infrastructures, which has repercussions on the time taken to process goods, along with the fact that containers and ships return empty, thus making maritime transport in Algeria one of the most expensive in the Mediterranean basin.

✓ Maritime transport. Ports. Algeria. Freight. Maritime trade.

## 1. INTRODUCTION

Maritime transport is a key factor in globalisation and stands out from other modes of transport because of its competitiveness and capacity, ensuring the transport of more than 80% of the volume of goods traded around the world (Ammour, 2015). Further, the world trade relies on the effectiveness and efficiency of the maritime transport system, as the volumes transported by sea are constantly increasing. Likewise, the development of means of transport, predominantly maritime transport, has shown to be one of the most important factors in stimulating international trade. On the one hand, ingenuity, human intelligence and technological developments have increased the volume and load of the world's maritime fleet, and on the other, port infrastructures have undergone significant development, hence becoming an essential link in the international logistics chain.

Nowadays, governments are concerned about the competitiveness of their economies, and are aware of the importance of the efficiency of the port logistics chain as a fundamental parameter that has a positive influence on maritime transport operations. Above and beyond, one of their major concerns is the modernisation and development of their basic infrastructure, mainly port infrastructure. Indeed, port infrastructure stands for a major lever for the prosperity of local economies and foreign trade.

For a country like Algeria, almost all international trade flows are transported by sea, the fact of which gives a strategic character to the mode of transport by ship and the port infrastructures providing support thereof. In this respect, the central question that could be asked is as follows: What constraints are impeding the development of maritime freight transport in Algeria?

For better definition of our research problem, we have formulated the hypotheses listed below:

1. The infrastructure, equipment and connectivity of ports represent the determining factors in the development of maritime freight transport;
2. The freight rates to Algeria have a negative impact on logistics costs;

3. The use of information and communication technologies reduces ship handling times.

More to the point, we are attempting, in this paper, to shed light on the current state of the maritime freight transport sector in Algeria, together with characterising the main obstacles associated thereto. Further, we examine the government's strategy for development purpose of such sector.

## **2. Findings on the maritime freight transport in Algeria**

Indeed, Algeria has an extensive coastline, assessed to more than 2,148 km of coastline (Leslous, 2023), with a ratio of 0.654 m/km<sup>2</sup> (UNCTAD, 2023), thus making it one of the most extensive in the Mediterranean, strategically located close to Europe and the main shipping routes. According to Setti and al, (2011), 95% of the country's international trade is being carried out through sea. In terms of logistical support infrastructure for maritime freight transport, this region has 11 commercial ports. Nonetheless, these ports are handicapped by the quality and lack of infrastructure, together with the operating equipment.

According to the World Bank's latest report on logistics performance "*connecting to compete 2023*", Algeria ranks 98<sup>th</sup> with a score of 2.5 out of 05. This index takes into account a country's logistics perception, and it is made up of 06 elements: the quality of infrastructure, customs, international transport, logistics skills, shipment tracking and, lastly, waiting times for goods at borders. Furthermore, according to the UNCTAD report on maritime transport connectivity published in 2019, Algeria is ranked the 92<sup>nd</sup> with a score of 12.81 out of 100. Besides, the liner shipping connectivity index is an indicator of a country's position in global liner shipping networks. Further, this indicator takes into account five elements: the number of ships docking in ports, their carrying capacity in TEUs (Twenty-Foot Equivalent Units), their maximum tonnage, the number of services allocated to ships and, in closing, the number of companies operating container ships to and from a country's ports. On the other hand, the Algeria's ranking reflects shortcomings in terms of existing infrastructure, and the weakness of the national shipping industry in favour of foreign carriers, as well. In virtue of which, this situation penalises the development of maritime freight in Algeria and considerably weakens the national economy.

More to the point, according to Algerian customs statistics, Algeria's imports for 2020 are evaluated at \$34.4 billion. Nevertheless, according to the Bank of Algeria's annual report for the same year, imports of transport services amounted to \$2.57 billion (i.e. 7.5% of the value of imported goods). Nonetheless, as Ammour (2015) points out,

transport costs have reached peaks of 40% for certain products and services to and from Algeria, with an annual average of 30% due to a lack of control over the scale of values.

Moreover, these additional costs are alike due to the fact that Algerian operators have yet to master the international goods transport market, concluding contracts using the CFR Incoterm, without really knowing the amount of sea freight that is included with the value of the goods, and leaving the foreign supplier free to choose the carrier himself and apply excessively expensive freight rates. As a consequence, national expenditure on maritime freight transport has shown to be significant. In virtue of which, these additional costs hinder the competitiveness of Algerian companies, particularly those wishing to go international, and reduce the cash flow of companies that pay much more for the transport of their own goods. Noticeably, this has a negative impact on the purchasing power of Algerian consumers (Tighilt and al, 2021).

### **3. Constraints on the development of maritime freight transport in Algeria**

In Algeria, the maritime freight transport sector faces quite a few constraints that hinder its development. These include the following points:

#### **3.1. Weakness of the national maritime fleet**

During the 1980s, the national fleet was one of the 50 best in the world. In fact, the national fleet was made up of modern and sophisticated vessels that provided almost half of the country's maritime transport needs. According to Bouarroudj (2012), at that time (the 1980s), with a national flag made up of 79 vessels of various types, the country had one of the leading fleets of commercial vessels in Africa and the Arab world. Above and beyond, this entire fleet was operated by the Algerian National Shipping Company (CNAN). In addition to its own fleet, the CNAN used chartered vessels belonging to the Algerian-Lybian Maritime Transport Company (CALTRAM), a joint venture between CNAN and Libya, which had four vessels.

Subsequently, in the early 90s, the reorientation of the political and economic system towards an approach more in line with the market economy and the desire to open up the Algerian economy further, led to an increase in international trade flows of goods and services. In this context, and with a view to diversifying and increasing national production and exports, Algeria has adopted a new economic and trade policy favourable to private productive investment, which carries in its wake the desire to disengage the state from the economic sphere. In addition, the signing of association agreements with the European Union in 2002, and with Arab countries in 2009 as part of the Greater Arab Free Trade Area (GAFTA), along with other international trade agreements, have further helped to intensify trade with the rest of the world.

Nevertheless, on this point, some authors, in respect such as Setti and al (2011), believe that the transition from a planned economy to a market economy has only aggravated the trend, particularly in the maritime transport sector. Indeed, the country failed to maintain its policy of modernising and developing the maritime fleet thereof, whilst the development of the national goods transport fleet has run counter to that of foreign trade, for reasons linked in actual fact to the poor management of the public shipping company.

Unquestionably, the undertaking of several reforms in the maritime transport sector in accordance with the Maritime Code promulgated in 1998 (contained in Law No.98-05 dated 25<sup>th</sup> June 1998, as amending and supplementing the Ordinance No.78-80 dated 23<sup>rd</sup> October 1976), along with the lack of investment in the sector, has led to a considerable drop in the number of ships in operation. As a result of CNAN's management problems and the ageing of the national fleet, several ships have been laid up, seized and others sold. According to UNCTAD, the national maritime transport fleet for the year 2021 consisted of just 25 vessels in the public domain, with a total carrying capacity of over 673.4 thousand tonnes. Although this is lower than in 2005, 2010 and 2015, mainly due to the drop in the carrying capacity of bulk carriers, it should be noted that the national maritime transport flag has been consolidated by container ships since 2017, with a carrying capacity of 36.5 thousand tonnes, or 5637 TEUs.

**Table 1.** Some indicators for international trade in goods, services and transport capacity in Algeria

|                                                         |                                        | 2005  | 2010  | 2015   | 2022       |
|---------------------------------------------------------|----------------------------------------|-------|-------|--------|------------|
| Total merchandise trade (millions \$US)                 | Exports of goods                       | 46002 | 57053 | 34668  | (e) 60 924 |
|                                                         | Imports of goods                       | 20357 | 40473 | 51702  | (e) 39 027 |
|                                                         | Balance of trade in goods              | 25645 | 16580 | -17034 | (e) 21 897 |
| Total trade in transport services (US\$ million)        | Exports of transport services          | 851   | 759   | 681    | 738        |
|                                                         | Imports of transport services          | 1801  | 2970  | 3690   | 3 144      |
|                                                         | Balance of trade in transport services | -950  | -2211 | -3010  | -2 406     |
| Transport capacity by type of vessel (Thousands of DWT) | Total fleet                            | 913.0 | 764.6 | 802.0  | 651,8      |
|                                                         | Oil tankers                            | 47.0  | 25.1  | 17.2   | 72,2       |
|                                                         | Bulk carriers                          | 288.0 | 204.3 | 149.6  | 53.5       |
|                                                         | General cargo ships                    | 135.0 | 64.5  | 112.7  | 105.7      |
|                                                         | Container ships                        | ..    | ..    | 0.0    | 82,6       |
|                                                         | Other vessels**                        | 443.0 | 470.7 | 522.6  | 337,9      |

\*DWT: Deadweight Tons, refers to a ship's cargo capacity or the load a ship can carry including crew, bunkers and provisions.

\*\*Passenger ships, specialised ships, service ships and assistance ships.

**Source:** Compiled by the authors using data from Algeria's maritime profile (UNCTAD, 2023), at: <https://unctadstat.unctad.org/CountryProfile/MaritimeProfile/fr-FR/012/index.html>, (consulted on 28/09/2023).

In terms of maritime transport capacity dedicated exclusively to goods (excluding hydrocarbons), Algeria has a fleet of 12 vessels divided between two companies belonging to the Algerian Maritime Transport Group (GATMA): CNAN MED, which has 5 vessels including two container ships, and CNAN Nord, which has 07 vessels. Nevertheless, given the large volumes of goods imported or exported, this fleet is insufficient to meet the national economy's needs in terms of maritime transport. In fact, every year the national economy incurs significant losses in foreign currency associated with the maritime transport of goods provided by foreign transport companies. According to the UNCTAD (2022), in 2010, the bill for imported maritime transport services amounted to nearly 2.97 billion US dollars, whilst in 2021 it would be around 3.14 billion US dollars. Therefore, it is imperative for the country to renew, modernise and consolidate its maritime fleet in order to improve the rate of coverage of such mode of transport by the national flag.

### **3.2. A sector monopolised by foreign shipping companies**

Algeria is known for importing the bulk of its basic products and raw materials, in the form of semi-finished products and products intended for resale in the same condition as received. Similarly, it exports a variety of non-hydrocarbon products, albeit of lesser importance in terms of volume and value. These international trade operations are carried out mainly by ship. Nonetheless, despite the importance of such operations, the participation of the national flag in the maritime transport service is insignificant compared with that of foreign carriers.

The weakness of the national shipping industry has allowed foreign shipping companies to monopolise the bulk of Algerian maritime freight following the boom in imports over the last ten years. Indeed, according to Haddoum (2014), 97% of maritime freight bound for Algeria is held by foreign ship owners, whilst the national flag transports, on its own ships, only 1.4% of the overall tonnage of solid goods and 1.75% of container traffic (Slimani, 2018). The latter take advantage of the inadequacy of the national fleet, the dilapidated state of port infrastructures and the fact that their ships return empty to impose their conditions and apply excessively high freight rates, a situation that weighs heavily on the national economy. Dependence on the services of foreign shipping companies to the detriment of national operators threatens the security of supplies, generates colossal losses, increases logistics costs and puts a strain on the country's foreign exchange reserves.

### **3.3. Inadequacy in terms of port support infrastructure**

In the context of globalisation and the increasing openness of national economies, the performance of the logistics chain, and in particular its port-related aspects, is an essential vector for competitiveness and economic growth. Undeniably, port infrastructure facilitates the handling operations associated with maritime transport and enhances the competitive advantages of countries. Besides, the effectiveness and efficiency of port infrastructures are essential for promoting international trade. Though, given the dilapidated state of existing infrastructure, for the most part in terms of theoretical depth and storage space, and the inadequacy and slowness of new investment in the port sector, transshipment infrastructure, which supports international transport by sea, is significantly behind schedule in Algeria. This shortfall in support infrastructure, which forms the basis of port logistics, is one of the main factors affecting the cost of maritime transport of goods.

In view of the fact that hydrocarbons account for the lion's share of Algeria's exports, the country has invested in and specialised in oil ports adapted to the traffic, to the detriment of cargo ports, which are considered, for the most part, to be first-generation ports. According to Mohand-Cherif (2007), most Algerian ports were built as a series of short and narrow basins with sheds close to the quays, separated from each other by narrow breakwaters. Besides, they were built during the colonial period between 1840 and 1959, with the exception of the ports of Arzew, Skikda and Djendjen, which were built in the post-colonial era. Given their characteristics and the quality of their equipment, a good number of Algerian ports do not rise to the level of logistics platforms, and are content to be load break points.

Algerian ports are characterised by a shallow draught, averaging 12 metres, with the exception of the port of Djendjen, which is located in deep water and has a draught of 18 metres. Likewise, this limitation is incompatible with large ships, some of which require more than 20 metres draught. In some cases, ships that cannot find the theoretical depth required are forced to head for other ports to unload their goods and return to the initial port. However, this weakness impedes the mass shipment of containers. Container ships with large load capacities are unable to dock in Algerian ports, thus the circuits are organised from external platforms such as hubs (Setti and al, 2011). More to the point, this situation forces ship-owners serving Algerian ports to use cargo vessels with a loading capacity of between 300 and 800 containers. This type of vessel prevents Algerian shippers from benefiting from economies of scale and from taking advantage of the opportunities offered by mass loading, which explains the

excessive amount of freight destined for Algerian ports, which only can accommodate low-capacity container ships. Indeed, most Algerian ports were built to old standards. They were adapted to small ships that do not carry large quantities of goods. For instance, the port of Algiers, the country's largest cargo port, is unable to accommodate first-generation container ships (1200 Twenty-Foot Equivalent Units) because of its shallow draught of 11.5 metres.

In addition, these infrastructures do not have sufficient storage space to contain the flow of goods that pass through Algerian ports every year. Besides, these warehouses and temporary storage areas, which often take the form of low-capacity plots of land, are narrow and saturate the disembarkation, embarkation and storage areas for goods. in virtue of which, this situation is due to the fact that the majority of ports are built in urban areas and have very few prospects for expansion, with the exception of the port of Djendjen. Further, the ports are still surrounded by urban areas, the fact of which prevents any expansion and even reduces their capacity. For instance, the port of Algiers has seen more than half its surface area shrink due to problems linked to the urban fabric, from 126 hectares in the 1970s to half that surface in the early 2000s (Setti and al, 2011).

As regards port management facilities, there are a number of shortcomings in port management equipment, linked to a lack of equipment and the deterioration of existing equipment, which seriously hinders handling operations. Above and beyond, this situation has a direct impact on the efficiency of port operations by lengthening the time taken to process goods, which in turn prolongs the stay of ships at quayside and generates additional costs for national operators. By way of comparison, the average processing time for ships in the port of Algiers is between 10 and 12 days, unlike our Mediterranean neighbours, which take no more than 05 days. However, the equipment needed to manage and operate a port terminal is very expensive, and the major difficulty lies in installing high-performance equipment in respect such as gantry cranes, as in the port of Bejaia. In short, goods handling equipment in Algerian ports needs to be modernised, and container handling equipment needs to be upgraded, accordingly.

### **3.4. Destination to Algeria; a container trap**

As a country whose exports are dominated by the hydrocarbon sector, the Algerian economy is rentier par excellence. According to Algerian customs statistics for 2019, non-hydrocarbon exports account for just 7.20% of the \$35.82 billion in total recorded exports. Nevertheless, this situation has a negative impact on the cost of shipping goods

to Algeria. Definitely, because of the low level of non-hydrocarbon exports, ships leave almost empty, and ship-owners are forced to pass on the extra cost of this empty return to the freight rate. In addition, national operators involved in international trade often fail to respect the statutory deadlines for returning containers to their owners. More and more, the latter consider Algeria to be a veritable container trap because of the failure to return transport equipment on time. These delays generate additional costs, known as *demurrage*, which are costly to the national economy.

In reality, this phenomenon is the result of two major constraints: on the one hand, the dilapidated state of port infrastructures and superstructures, which handicaps handling operations and lengthens dock times, and on the other hand, the excessively long times taken to return containers to ship-owners. In fact, the rental of containers by national operators to transport their goods from abroad is subject to an exemption period which begins as soon as the equipment is unloaded from the ship. For standard or *dry containers*, the grace period is 15 days, but for special equipment, in respect such as refrigerated containers or *reefer containers*, the period must not exceed 03 days, otherwise a penalty will be charged for each day's delay.

For the purpose of remedying these problems of delays and reducing the maritime freight bill in Algeria, the public authorities have taken a number of measures in accordance with Articles 26 and 27 of the Executive Decree No.20-348 dated 23<sup>rd</sup> of November 2020, laying down the conditions for the exercise of activities ancillary to maritime transport. In fact, economic operators importing goods for resale in the same condition as received are required to return empty containers before the end of the exemption period. Any detention of containers outside the duty-free period without a valid reason (border control or in the event of a dispute) will expose the offender to precautionary measures in respect such as the withdrawal of the certificate of compliance, and registration in the national file of fraudulent offenders, as well. Demurrage and container retention charges are a real obstacle to the development of maritime transport in Algeria.

#### **4. Strategies envisaged for the development of maritime freight transport in Algeria**

Logistical costs, particularly the cost of maritime freight, are a real obstacle to the development of maritime trade in Algeria. In order to overcome the constraints facing maritime freight transport in Algeria, a strategy has already been initiated by the public authorities. This strategy focuses mainly on the following elements:

#### 4.1. Modernising port infrastructure and management facilities

Algeria is significantly behind schedule in terms of port infrastructure. As a fact of matter, outdated facilities combined with a lack of operating equipment are causing huge losses in terms of logistics costs for the country. Besides, rapid adaptation of port infrastructures is vital if the country's economic growth is to be possible. According to De Noray (2015), in order to reach international standards in port handling and benefit from economies of scale, it is necessary to modernise port infrastructures and specialise ports by building terminals adapted to each type of maritime transport, in respect such as containers, vehicles and, in closing, liquids.

With a view to improving transshipment logistics in Algeria, the public authorities have launched a series of projects aimed at modernising port infrastructure and equipment. Hence, the aim is to minimise the cost of transporting goods, reduce waiting times for ships at quayside and offer better handling of goods. Subsequently, the government has set up a port infrastructure development plan (Master Plan for Maritime Infrastructure 2005-2025) as part of the National Spatial Development Plan (SNAT 2025/2030). In virtue of which, this plan provides for the development of national investment in the field of maritime transport and the search for strategic cooperation likely to attract capital and knowledge adapted to the reality of the national flag. In terms of port infrastructures, it plans to modernise and expand commercial ports, connect ports to transport infrastructures along with opening up maritime and air transport to goods for national operators, with the aim of reducing logistics costs by half.

In addition, one of the flagship projects that is set to revolutionise the Algerian port sector is the commissioning of the port of *El Hamdania* in the Province of Tipaza. Described as the “project of the century”, this mega-infrastructure should, on completion, constitute one of the most important maritime infrastructures in the Mediterranean basin and on the African continent. With 23 quays, a theoretical depth of 20 metres and a quay length of more than 3,000 linear metres, this maritime hub will be able to accommodate all types of ships. Similarly, it will be directly linked to the East-West motorway and the Trans-Saharan motorway, and will alike have a connection to the national rail network. This infrastructure will have an annual handling capacity of around 6.5 million containers and 25 million tonnes of goods (Ngueyap, 2021).

A number of projects are under way to modernise existing port infrastructures. These include the extension of container terminals in ports such as Algiers, Oran and Jijel, and the construction of terminals specialising in the storage of mineral products in the ports of Arzew and Annaba, with the aim of promoting non-hydrocarbon exports. Finally, the ports will be equipped with new handling equipment, in terms of superstructure.

#### **4.2. Use of information systems and digitisation of port activities**

The port sector is characterised by the complexity of port operations and services, the disparity of port functions and the diversity and complementarity of its actors. Consequently, the movement of goods and ships in a port requires the exchange of information between several actors. However, information and communication technologies (ICT), in particular electronic data interchange (EDI), have shown to be an essential tool for exchanging information between the various port actors, as information is one of the essential resources of any port.

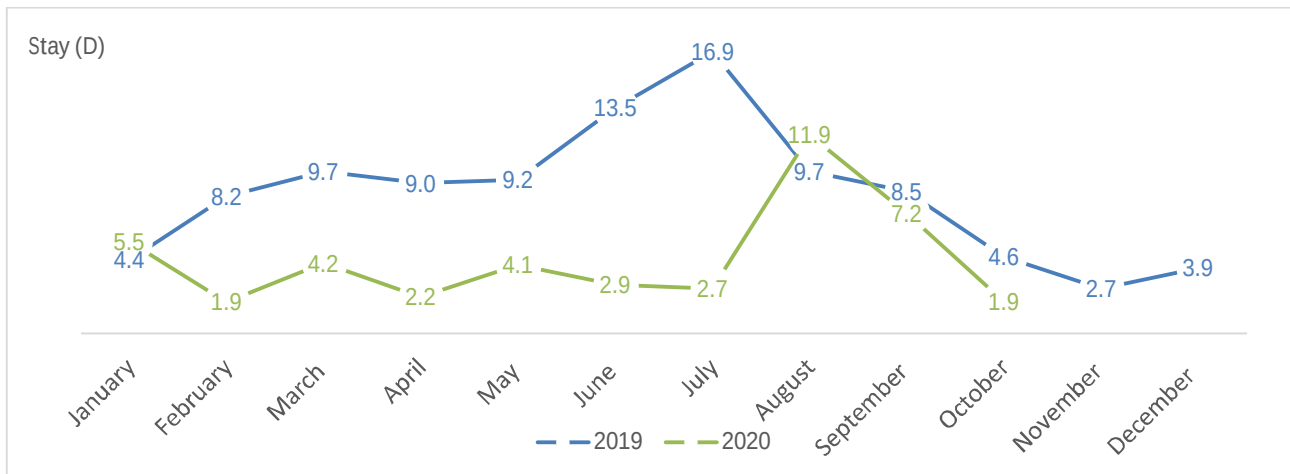
The integration of information systems in ports has created intelligent port facilities. Their application has made the management of processes more fluid and easier, together with speeding up physical and information flows, as well. In addition, information systems are essential to the rapid and accurate management of information, and to the processing and transfer of large volumes of data within port organisations, thanks to the dematerialisation of documents accompanying goods transported the through sea. Hence, manual processing of the various documents can lead to errors and delays that adversely affect port operations and lengthen the time taken to process ships and goods at port facilities.

Regan and Golob (2000), believe that information systems can reduce delays inside and outside ports in order to avoid saturation of port facilities, which has a negative impact on commercial activities. As a result, the use of information systems considerably reduces the problem of congestion in ports, given that ship handling time is a significant indicator for measuring port performance. In addition, Hamri and Jouad (2020), point out that information systems make it possible to coordinate actors and standardise port procedures and services by synchronising the efforts of the various actors involved in the process. Hence, this makes it possible to improve ship handling times and increase the productivity of handling service providers.

Aware of the vital importance of using information systems, and as part of its programme to modernise ports and digitise the port logistics chain process, the Algerian authorities have set up a community platform called the Algerian Port Community System (APCS). This is a digital platform for electronic data interchange

(EDI) that facilitates the exchange of information between the various actors in the port logistics chain: the port authority, ship-owners, freight forwarders, shippers, the customs administration, the police and the coastguard. Likewise, this community platform, which facilitates the exchange of data in an intelligent, fluid and secure way (Simoni and al, 2020), aims to eliminate paper documents and manage port activities electronically, in order to reduce the time taken to process goods, improve the port passage process through increasing the services provided to ships and goods, in respect such as their physical and administrative tracking in real time, whilst preserving the confidentiality and security of the information exchanged. One example is the port of Bejaia, whereat experiments with this type of platform have produced very significant results. Additionally, with the aim of optimising productivity and the quality of services provided to container ships transiting through the port of Bejaia, reducing waiting times in the harbour and digitalising port activities, the Port Company of Bejaia (EPB) has introduced a berthing and handling planning system for container ships via a web space, called *Bejaia Port Berthing System*. On the other hand, a berthing window is the interval of time, expressed in days alongside the quay, allocated to a Liner operating at the Port of Bejaia for unloading and loading its container ships. Likewise, the docking window system has made it possible to significantly reduce the waiting time for ships in the harbour, from several days to just a few hours, thereby reducing the surcharges paid in foreign currency.

**Fig.1.** Impact of the docking window system on ship waiting times in the harbour



**Source:** Realized by the authors using data from the Bejaia port company

According to data collected from officials at the Bejaia port authority, as per illustrated in Fig.1, during 2019 (curve in blue) ships transiting through the port of Bejaia spent an average of 8.7 days in port before docking, with peaks of up to 16.9 days (July 2019). This situation justifies the exorbitant amounts of demurrage paid by Algeria to foreign ship-owners. On the other hand, we note that since the introduction of the

berthing window system in 2020 (green curve), the waiting time in port has considerably fallen, to an average of 3.4 days in 2020; even better, in 2021 container ships spent an average of only 0.43 days in port, or just under 11 hours. In virtue of which, information and communications systems have become essential tools for port competitiveness, as their use optimises the performance and competitiveness of ports.

#### 4.3. Renewing of the national maritime fleet

In fact, maritime transport is one of the essential vectors of globalisation that guarantees the economic development of nations. Ships account for more than 80% of world trade (UNCTAD, 2019). As a result, having a national flag for shipping goods gives us strategic independence and international influence. In Algeria's case, almost all of its foreign trade is carried by sea, giving this mode of transport strategic importance. Conversely, the national flag only handles a tiny proportion of the country's international trade.

Additionally, Algeria has shown a real desire to develop the national flag in order to better control the logistical costs associated with maritime transport. To this end, the government has launched an action plan for the purpose of consolidating the national shipping industry through the purchase of bulk carriers, container ships, general cargo vessels and passenger ships. Hence, the plan aims to implement mechanisms to secure the country's supplies of strategic goods, in respect such as cereals and milk powder, in particular by prioritising national shipping for the transport of strategic products. Besides, the country aims to increase the number of national shipping vessels by 2025, with a programme to acquire 27 vessels, 25 of which will be used to transport goods.

As of today, a dozen ships dedicated to the transport of goods have been delivered and put into service, including two container ships with a load capacity of more than 1,400 TEU. These vessels are equipped with sophisticated and environmentally-friendly equipment. In addition, the acquisition of 06 bulk carriers for the transport of cereals is scheduled for the end of 2023. In light of which, such acquisitions will give greater prominence to national shipping industry and increase the share of the national fleet in the maritime goods' transport market.

#### 4.4. Exploitation of extra-port areas

Dry ports are extra-port areas commonly referred to as *inland ports* or *multimodal logistics platforms*. Above and beyond, dry ports are extra-port temporary storage areas for goods, considered to be a natural extension of wet ports. In addition, they are areas set up for the receipt, checking-in and recognition on land of goods loaded or unloaded, as well as their storage, until they are loaded or removed (Guermah, 2021). On the

other hand, such areas have a logistical and commercial connection with a seaport and are mainly used to relieve congestion in the latter. In addition, dry ports improve connectivity between countries, particularly landlocked territories that do not have a seafront, by providing a logistical link between ports and their hinterland. Additionally, dry ports are designed for the storage and warehousing of goods, and for various logistics operations, as well, in respect such as grouping/deconsolidation, allotment, order preparation and distribution.

In Algeria, dry ports were created in application of the provisions of Article 67 of the Law No.79-07 dated 21<sup>st</sup> of July 1979, as amended and supplemented, on the Customs Code, and the Decision issued on 22<sup>nd</sup> Rabie Ethani 1432 corresponding to the 27<sup>th</sup> of March 2011 on Dry Ports. The main objective behind the creation of dry ports was to relieve the pressure on ports, alleviate malfunctions in the sector and reduce the logistical costs that heavily weigh on the country's economy. Further, the increase in imports of goods into Algeria since 2005 has led the public authorities to authorise the creation of dry ports. As a result, several public and private operators have set up dry ports in different regions of the country. However, in June 2020, in a bid to clean up the sector, the authorities suspended the transfer of goods to these extra-port zones and closed them down.

Beyond doubt, extra-port zones play a key role in relieving congestion in seaports and facilitating the movement of goods. In addition, such logistics platforms help to reduce the costs associated with logistics, such as demurrage, which heavily weigh on the country's economy. Subsequently, it is imperative that the public authorities reorganise this strategic sector and implement new measures to benefit from the solutions offered by the operation of dry ports.

#### **4.5. The recourse to chartering**

The maritime transport of goods in Algeria is monopolised by strange ship-owners. In order to regain a share of this market, the public authorities should rely more on the involvement of the private economic sector, which could own its own ships or resort to chartering. According to Chevalier and Duphil (2009), maritime transport operations are carried out by ship owners, or by lessees who commercially operate ships leased from third parties. This form of operating ships by leasing is known as "chartering". Chartering is defined as an agreement whereby the charterer undertakes to make available to a charterer either a transport capacity for the purpose of carrying out a voyage, or the use of a vessel for a certain period, in return for payment of a sum known as freight.

With regards to Algerian regulations, the chartering contract is governed by the Algerian Maritime Code (Article 640 to Article 737 of the Algerian Maritime Code), which sets out the rules and procedures for chartering in Algeria. In practice, the chartering business in Algeria poses a problem. Article 44 of the Law No.98-05 dated 25<sup>th</sup> June 1998, as amending and supplementing the Order No.76-80 dated 23<sup>rd</sup> October 1976 on the Maritime Code states that article 649 of the Order No.76-80, referred to above, has been amended and stipulates that ship chartering activities may be carried out by any natural person of Algerian nationality or any legal person under the Algerian law, who is a ship-owner and whose principal business is on national territory. Besides, this code defines ship-owner in two different articles: Article 384 of the Algerian Maritime Code, which states that “*Ship-owner means any natural or legal person who operates a ship and hires seafarers for this purpose*”, and Article 572 of the Algerian Maritime Code, which defines ship-owner as “*any natural or legal person who operates a ship in his own name, either as owner of the ship or under other titles granting him the use of the ship*”.

According to the Algerian Maritime Code, to be able to charter goods, you have to own the ship or have it at your disposal through a charter. This condition is a real obstacle for Algerian operators wishing to engage in the chartering business, as they must own the vessel. Unfortunately, this same provision does not apply to foreign carriers operating in Algeria, as they can simply hire out vessels in order to charter goods to Algeria. Further, the government must adapt the regulatory and legislative provisions to allow national operators to charter in Algeria, and open up maritime transport to the private sector. More and more, opening up the sea freight business in Algeria will both reduce the cost of maritime transport and stimulate the national economy.

## 5. CONCLUSION

The state of Algeria’s maritime freight transport sector leaves no doubt as to the urgent need to modernise and adapt the same to the country’s foreign trade requirements. Indeed, the country’s average ranking of 98<sup>th</sup> in terms of logistical performance, the position of Algerian maritime transport in the world together with its poor contribution to international goods transport activities reflect a most disappointing reality. In addition, the modest technical level of port infrastructures, most of which are outdated, as well as superstructures with limited capacity, generate considerable additional costs, making Algeria’s maritime freight rate the highest in the Mediterranean basin.

In addition, the weakness of the national shipping industry involved in maritime transport operations, the use of the services of foreign transport companies and the resulting additional costs are causing the country considerable losses in foreign currency, having a negative impact on the activity of Algerian companies and further weakening the purchasing power of consumers.

In terms of regulations, reforms must be applied as quickly as possible to free up maritime freight and involve private national operators more in the maritime transport of goods. In addition, efforts to consolidate and modernise the means of maritime transport, as well as those dedicated to the processing, handling and storage of goods, must be continued and increased further. On the other hand, the modernisation of management tools and the steering of operations linked to port logistics constitute another lever capable of boosting the maritime transport sector in Algeria and making it an important link in international logistics.

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