

## **Development, exchanges and connectivity, a Mediterranean maritime trio**

**Paul Turret, PhD geography, Director of Institute of Maritime Economics (ISEMAR).  
Nantes Saint-Nazaire**

The history of post-war Europe is largely that of the economic integration that made political union possible. The Europe of the original group of six founding countries has expanded westwards (UK, Ireland), southwards (Greece, Spain, Portugal), northwards (Sweden, Finland) before making the East integration and two Mediterranean Island Cyprus and Malta. Non-political, but just as strategic is the economic partnership to be built with non-European Mediterranean countries. Economic integration, whether it be community or partnership-based, has allowed the multiplication of investments, productive processes and exchanges. As soon as the Euro-Mediterranean regions and some countries of the basin are economically integrated, maritime transport is growing and will continue with the continuous development of the other countries of the Southern and Eastern shores. A dense network of maritime lines, especially ro-ro, interconnects the regions of the Mediterranean basin. Can maritime transport do more? Can it do better? It is as much a question of the service offer as in the environmental performance and in the modal complementarity.

### **Insular bases and Motorways of the sea**

Maritime transport in the Mediterranean Basin has gone through several phases. The first corresponds to the connectivity with the islands of each country (Balearic Islands, Corsica, Sardinia, Sicily) facilitated by the use of ferries and ro-ro ships since the 1970s. For a long time weakly developed and reservoir of internal migrations, these islands have become with tourism very frequented regions and requiring intense links by their economic development. Of course, the European policy of regional aid is also to be important.

Even today, the dynamics of Mediterranean companies are based on the intensity of passenger and freight flows with the islands. Naturally, there are national differences with the level of demography, development and tourism of the various islands, but all feed the need for strong connectivity. For several maritime lines also benefit from public aid (delegation of public services). The Mediterranean islands, with their greater economic integration, have gained a very high coverage of maritime lines over the last 40 years.

The island connections are the basis of the historical maritime activity of companies in the western Mediterranean basin. There used to be large public companies, but they have experienced the same fate of privatization. The SNCM became Corsica Linea controlled by Corsican economic interests. In Italy, Tirreno was sold to a private competitor, Moby Line (Onorato family). In Spain, Trasmediterranea has had different

owners, the last<sup>1</sup> sale the Balearic links to Grimaldi group in 2021. For these companies, connectivity with the islands is a source of structural activity and links with the islands of other countries are tourist markets.

Grimaldi, based in Naples, is one of a few of private companies that dominate the basin. The others are GNV in the wake of the Italian-Swiss group MSC (Aponete family) and two outsiders who have become leaders, Balearia on the Balearic Islands and Corsica Ferries on Corsica. To this panorama, we must add the Danish giant DFDS, which has taken positions in the freight business in France and Turkey, thanks to acquisitions. Finally, the French company CMA CGM also has a ro-ro activity in the Mediterranean.

For a long time, the connections between the shores of the Euro-Mediterranean countries seemed useless. The economies of the Mediterranean regions were linked to their national space or to Northern Europe. The development of the automotive industry in the Iberian Peninsula was the ferment of an industrial integration between Spain and Italy. The Grimaldi company based his development on the needs of the automotive industry to launch services between Spanish and Italian ports. The Italian shipping company launched the Motorway of the sea concept with high-intensity ro-ro freight services in the late 1990s. GNV has focused its positioning between Italy and Spain on passenger services.

For twenty years, the links between Spain and Italy have demonstrated their interest, especially since the coastal route is long, expensive and congested at each border crossing and metropolis. The East-West maritime route is faster and more economical. On other experience was tried between the French port of Toulon and the Italian port of Civitavecchia in the 2000s with a small automobile base, but the weakness of the other freights led to failure. In the absence of massive trade between central Italy and France, maritime connectivity was not useful. It is therefore necessary to have an economic reality to carry an intra-Mediterranean market.

Another limitation is the competition from the road. The idea of a cabotage line between southern Spain and a French port is old. The traffic base could be fruit and vegetables from Andalusia and Murcia, but the conditions of competition are not favorable. The logistics of fresh products requires fast transit times and the cost of road transport is more advantageous than sea transport. For the time being, only a strong increase in the cost of road transport will allow a transfer to the maritime mode. European cabotage, initiated to reduce pollution from road transport, must henceforth be included in the objectives of reducing greenhouse gas emissions by showing environmental performance.

## **Environmental challenges**

One of the challenges of tomorrow's maritime industry in the Western Mediterranean is modal shift transfer from the road transport. It is therefore still a question, as it was twenty years ago, of reducing road flows

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<sup>1</sup> Canarias and family group Armas has kept the lines with the Maghreb and the Spanish territories of Ceuta and Melilla.

through alternative maritime solutions. The Motorways of the Sea networks have already been developed in response to market demands and geographical consistency. To have a new impulse, it must be even more economical and clean.

The green impulsion is double. One from European Union with the "Fit for 55" roadmap initiated by the European Commission. It's a part of its "Green Deal", which has a maritime component. The second impulsion there are the requirements of the IMO with rules on the efficiency of ships in 2023 and a low sulfur emission zone for Mediterranean Basin in 2025 (which has an operational cost for shipowners). In addition, the price of energy weighs heavily and reinforces the issue of transport efficiency. The competition between road and maritime modes in the Mediterranean will be with the green and saving consummation.

For the maritime sector, innovation is a major and imperative action. LNG fuel solutions, electric batteries or fuel cells (hydrogen) will multiply for the ferry and ro-ro fleets in the Mediterranean Sea. Ports will also be equipped with shore power for ships. Thus, the need for economic integration is being met by the need for maritime connectivity, but also increasingly by energy efficiency and the reduction of operational pollution (CO<sup>2</sup>, fine particles).

Thus, maritime and port modernization is an imperative for all Mediterranean players. On the shipping side, the groups are large enough to maintain a high level of innovation. The other trend is also in the gigantism with the super ro-ro ships of Grimaldi and DFDS which goes in the direction of efficiency of the maritime transport.

For ports, the investments are also needed to organize the calls of larger ships and important flows. Ro-Ro ports need more space. In March 2022, the Barcelona Port Authority approved the transfer of the ro-ro cargo activity to Port Nou with 19 ha dedicated. This will also help reduce pollution in the center of Barcelona. In the case of Marseilles, the port community is asking the port authority (GPM) to launch an ambitious modernization project for the ro-ro port in the Eastern basins.

The rail link is a new feature for ro-ro transport in the Mediterranean Sea. The objective is to ensure the complementarity of the Ro-Ro maritime and rail solutions. The integration of rail and maritime solutions has a Mediterranean origin, but is linked to a specific market. In 1992, the war in Yugoslavia disrupted logistics between Turkey and Europe. The Turkish road transport sector developed a maritime solution via the Aegean Sea and the Adriatic Sea<sup>2</sup>. The Italian port of Trieste thus became the gateway for Turkish cargos to Europe.

In the 2000s, the integration of the European and Turkish economies has become increasingly strong and the density of trade has increased. Connectivity has therefore developed. France has been integrated with first

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<sup>2</sup> Initiated by Turkish players (UN RORO Ekol Logistics), the maritime activity passed in 2018 into the hand of the massive Danish company DFDS.

the port of Toulon and then the port of Sete. Since 2021, a line also connects the Spanish port of Tarragona with the needs of the Spanish textile giant Inditex.

Initially the Turkish process involved moving full trucks, with the drivers using air services. Now, most trailers travel alone, so European rail solutions are needed. First in Trieste and now in Sete, Turkish trailers use rolling motorways. The challenge for the Western Mediterranean maritime sector in the future is to develop rail solutions for roll-on/roll-off trailers. The port of Sete, which benefits from a Turkish line, already operates 10,000 trailers and has a target of doubling or tripling this number with 6 hectares developed by 2022. For Valencia, Barcelona and Marseille, the Ro-Ro mode must be linked to rail through terminals for rail highways<sup>3</sup>.

### **North – South trades**

The colonial time on North Africa, specially by France, had created a high density of North-South trade in the Western Mediterranean. With independence, the situation has naturally changed, especially since each North African country has its own economic identity. Morocco and Tunisia are countries that have chosen a market economy with production exported to Europe. The liberty of investment<sup>4</sup> has allowed industrial relocation, which feeds important maritime flows of trailers in both directions.

The integration of Tunisia in the European economy is no longer in textiles industry but in value-added sectors such as aeronautics and electrical. The connectivity of Tunisia is based on the roro which allows rapid exchanges with Europe. The maritime traffic is done with Marseille and Genoa and more modestly with Barcelona. There are about 140,000 trailers per year, half of which are related to France. The freeway of the sea between Marseille and Tunis is provided by the alliance of CMA CGM and DFDS and the Tunisian national shipping company CTN. On the Italian side, Grimaldi and GNV are also present in Tunisia.

It should be added that the Ro-Ro mode also benefits from the malfunction of the container terminal of Rades. The construction of a new container port is being considered by Tunisia 100 km south of Tunisia. The port of Enfidha will offer containerized capacities adapted to international trade, but will undoubtedly preserve the rapid connectivity of the Ro-Ro mode required for Euro-Tunisian trade.

Morocco's situation is different, with a larger population and a larger economy, especially for exported agricultural products. There too, relocations have been important, with automobile production (Stellantis, Renault Nissan). Here too, the sea must be crossed, but on the reduced space of the Strait of Gibraltar. The port of Tangier Med allows the processing of a very high volume of trailers with 407,500 M units in 2021 of trucks crossing the short sea passage and cross Spain.

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<sup>3</sup> There are different technical solutions with horizontal loading (CargoBeamer, Modalohr) or vertical loading (intermodal trailers type P400 but also 45' pallet wide containers).

<sup>4</sup> For a long time, the European presence was mainly French, but today it is Spain and Italy that dominate foreign investments in Morocco and Tunisia.

With Morocco, Shipowners offer longer shipping solutions. GNV and Grimaldi have services for trailers from Italy. In France, La Méridionale has been offering a service from Marseille for some time, but has yet to find a trailer market. However, at some point there will have to be longer and denser maritime connectivity between Morocco and the ports on the northern shore (Barcelona, Sete, Marseille, Savona, Genoa). The main European companies will develop Euro-Moroccan freeways of the sea when the conditions of competition with the road mode through Spain are less unfavorable.

Algeria does not have the same characteristics of integration with Europe as its neighbor countries. The socialist economic model and energy rents (oil & gas) have distanced it from a free and open economy model. Ro-Ro flows do not exist, notably for reasons of cargo security. Containers are more suitable. The supply flows from Europe are made by small container ships from Spanish, Italian and French ports, which are nevertheless subject to expectations that make logistics complex in Algeria.

It is not clear whether Algeria will be able to develop in the next decade in a way that will encourage European investments. The country's only source of income is the sale of its energies; however, the oil & gas rent cannot be sufficient in the long term to transform the country's economy and its social stability. The economic integration of Algeria could be one of the challenges of the North-South partnership in the Mediterranean with a growth of maritime trade.

Connectivity will follow the logistical needs of a more diversified economy. It will be able to do so with the new port that Algeria wants to build in El Hamdania in the Cherchell region west of Algiers. The deepwater port will have Chinese financing and builders and will be for containerization, but also can accommodate ro-ro as in the case of Tangier Med.

Should we finally promote better maritime connectivity in the Western Mediterranean? This was the ambition of the Motorways of the Sea in the 2000s. Today we know that it is up to the market to do so, with competition from road transport being formidable. Italy has a national policy of “Ecobonus” that aims to make financial discounts for users of long-distance maritime solution with Sicily. The commitment to longer distances (Southern Spain, Morocco) will also depend on the market and economic needs, particularly the logistics of fresh agricultural products. Maritime transport must be effective and ecologically efficient; this is the role of shipping companies and, increasingly, of complementary rail transport. The ro-ro mode is better suited to the speed requirements of European logistics and to the integrated peripheries of the Maghreb and Turkey.

The economic development of the Mediterranean basin is an economic, social and political imperative. It must be one of the objectives of the EU's partnership policies. The growth of trade will therefore need an efficient maritime transport offering a speed that requires logistics in the Euro-Mediterranean economic bloc. Ro-Ro and railroads will be there for this purpose. The container remains a more economical solution with less efficient navigation time. But in either case it will be necessary to accentuate the connectivity of the sea common to three continents.