The Future TangerMed Port: Sign of Renewal of Southern Mediterranean Ports or an Isolated Initiative?

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This paper focuses on recent port developments in the Southern Mediterranean and in particular on the perspectives of the future Moroccan port, TangerMed, located in the Strait of Gibraltar. In the containerised transport market in the Western Mediterranean, the two Spanish ports of Valencia and Barcelona seem to be registering the most significant growth at present, whereas Gioia Tauro (Southern Italy) is experiencing a notable decline and Algeciras (Spain, Gibraltar) is approaching saturation with its current facilities. The forthcoming inauguration of TangerMed (July 2007 for the first terminal) should challenge this state of affairs.

For some twenty years now, the evolution of containerised maritime transport has allowed deployment of new container ports in the Mediterranean, yet one can legitimately wonder whether TangerMed, to become a hub port absorbing the growth of containerised maritime traffic from Asia, marks the starting point of the modernisation of ports along the Western Mediterranean's southern coastline or is simply an isolated initiative due to its geographic location and its strategic commercial position.

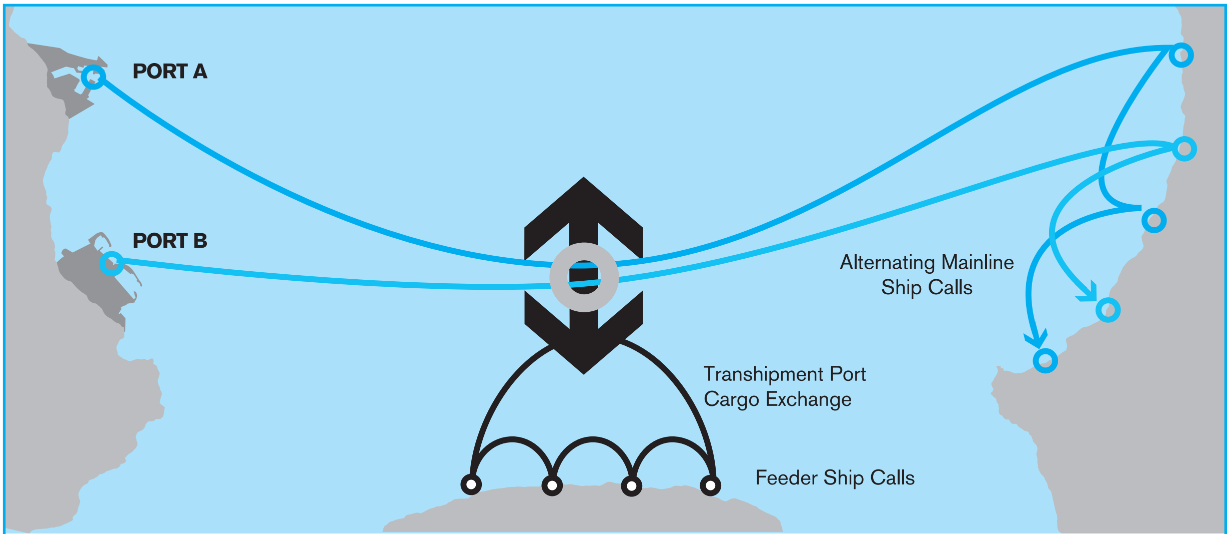
Containerised Traffic and Mediterranean Port Dynamics

A quick review of the mechanisms underlying port renewal in the Mediterranean area could be useful. As the ships used for containerised transport have gradually grown in size, the conditions for their operation have been reorganised with a view to improving productivity. The reduction of the number of ports of call for larger ships, the introduction of shorter, feeder ship services to regional ports, the generalisation of interlining at hub ports, the emergence of technical partnerships between shipping companies (alliances or joint operation of services) have produced significant gains in productivity for the maritime shipping industry (see diagram below). The use of very large ships (having gone from 5,000 TEUs in the past to 11,000 TEUs today, where TEU stands for a unit of measure equivalent to twenty feet) has thus been enabled and has allowed absorption of the historic growth experienced by world commerce since the year 2000, in particular with regard to trade with Asian countries.

The evolution of containerised maritime transport has allowed deployment of new container ports in the Mediterranean

These innovations in the container shipment industry have likewise encouraged the development of hub ports dedicated to transhipment between mainline ships (interlining) and between mainline ships and feeder ships (feedering). These hubs are located on major maritime transport routes or at the peripheries of semi-enclosed seas or archipelagos. Hence, the Baltic Sea, the Black Sea, Atlantic European ports and the majority of the islands in the Caribbean Sea are supplied essentially by feeder ships from a few hub ports, which are employed by intercontinental lines and therefore large ships. Certain hub ports are likewise dedicated to transhipment of containers from one mainline ship to another, and are therefore located along the most frequented maritime corridors, which in the great

MAP 3 **Transhipment Port**



Interlining

One ship departs from Port A and the other from Port B, both exchanging part of their cargo according to the destination ports into which they will call: they offer six ports of destination for each port of departure, actually only serving three each. Their time of call to port is lowered, as are their fixed port costs.

Feedering

Mainline ships needing to bring containers to regional or insufficiently equipped destination ports employ smaller ships called "feeders" for this finer service. Mainline ships only directly supply the major ports.

majority of cases consist of an East-West route: Asia – the Americas – Europe.

In this context of rationalisation, new ports have emerged in the Mediterranean to carry out the two transhipping activities: feedering and interlining. The first of these ports was Algeciras, on the Strait of Gibraltar, which was then followed by Gioia Tauro, Marsaxlokk in Malta and Cagliari in Sardinia for the Western half of the Mediterranean, whereas Port Said, Damietta and the new port of the Suez Canal in Egypt are the primary transhipment ports in the Eastern Mediterranean.

The advent of these Mediterranean ports has not had an impact upon Northern European ports. The latter have retained their function of local redistribution to regional ports as well as their role as inter-oceanic ports for the continent. The containers handled in Antwerp, Rotterdam and Hamburg, for instance, are thus partially redirected to Swedish, Irish and Baltic ports, among others, but also supply an extensive hinterland ranging from Western Europe to Poland, Hungary and Romania. In contrast to hub ports, these Northern European ports are "main ports" or "gateway ports" and combine the functions of regional maritime redistribution (feedering and interlining) and hinterland supply.

The rise in containerised traffic has thus not only benefited new hub ports: Valencia and Barcelona, the main Spanish ports, have consolidated their role as hubs for the Western Mediterranean and maintain transhipment traffic at approximately 30% of the containerised volume handled. On the other side of the Mediterranean and on a lower scale, Beirut and Istanbul (Ambarli) have acquired a similar position by combining the functions of hub ports for the Eastern Mediterranean with those of intercontinental ports for their respective hinterlands. In Egypt, Port Said, Damietta and the recently created Suez Port remain hub ports very similar to their counterparts in Algeciras and Gioia Tauro.

Marginalisation of Maghreb Ports

A great number of ports and even entire coastal stretches are absent from these hub port and main port networks. Thus in the Mediterranean Region, the growth in containerised traffic has certainly not benefited the many ports equally. Maghreb ports are today particularly marginalised.

The majority of ports along the Maghreb coast have largely insufficient and at times obsolete infrastructures: their depths limit their capacity to ships of medium draught, the handling devices are not always adapted and the conditions of merchandise processing (in particular controls) defer time spent in port and even cause congestion at terminals. In sum, they are served nearly exclusively by feeder ships, which increases the total transit time even more.

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In Algeria, the port of Algiers, the country's premiere port for containers and roll on/roll off (RoRo) cargo, suffers from chronic congestion despite the implementation of dry ports in Rouiba, in the vicinity of Algiers. The port of Algiers, originally conceived for conventional traffic, has had to be adapted to containerised cargo without displacing other types of traffic: roll on/roll off cargo, passengers, various bulk items and the fishing catch are still handled at the Algiers terminals. The main railway station of the capital encroaches upon roadways and the railway infrastructure is therefore underused: the existing rail line dedicated to port freight cuts across a coastal motorway. Railway traffic is only possible at night, as it interrupts road traffic. The platforms contain storage depots where some of the imported containers are controlled and stored; the terminals are not computerised and the containers are stocked in various port zones.

The infrastructure situation is a great deal better in Casablanca: the container terminal was planned expressly for container traffic, has enough depth to allow efficient organisation of storage, the handling equipment – gantry cranes and straddle carriers – is appropriate and container storage management is computerised. Yet container stripping/stuffing as well as verification and customs controls are generally effected within the port area, the dematerialisation of these procedures remaining largely incomplete. In the case of Casablanca as in that of Algiers, the cities have expanded considerably and port infrastructures are now hemmed in by metropolitan areas with millions of inhabitants. The possibilities for expansion are limited or even non-existent. Moreover, the premises of these ports are now considered strategic areas for urban development: they occupy a significant amount of surface area in the centre of the city, with good transport infrastructure and they offer excellent perspectives for major real estate operations. In addition, the central location of these two ports, the most important ones in these countries, each handling 500,000 containers per year, is a continuous source of nuisances associated with road traffic. This series of factors indicates the need for the displacement of certain types of maritime traffic and an in-depth reorganisation of port facilities in Casablanca and Algiers.

The port of Tunis has somewhat different problems. The historic port of Tunis which reached the sea via a long channel from the Lake of Tunis quickly proved insufficient and too costly to maintain. A new port in Radès-La Goulette was built on both sides of the channel and the route leading to Tunis. Originally designed for roll on/roll off ships, its facilities are not ideal for containerised traffic and it is clearly under-equipped. In addition, port depth is insufficient and dockyards are too small. Yet in contrast to the port of Algiers, it is not yet experiencing significant problems due to insufficient capacity. It is located on the periphery of the Tunis metropolis and this location constitutes a considerable advantage. The Port of Radès thus has a limited yet extant possibility for expansion at its current site for terminals handling a diversity of merchandise: the conversion of the quays now dedicated to bulk cargo and good management of the facilities should allow the port to handle the increase in containerised traffic for a number of years without running up against situations of congestion that would be detrimental to Tunisian trade. New road infrastructures currently in the last phases of construction will facilitate access to the port and should eliminate the current transit route through the centre of Tunis.

Though the situation of the Tunisian port may seem less difficult, the site is nonetheless highly constrained. The Port of La Goulette is soon to be transformed into a yacht harbour, whereas urban developers have been awarded licences to develop land along the lakeshore that will supposedly be given over to tourist infrastructures. At the same time, environmental regulations have become stricter and the creation of new land by reclamation from wetland areas is (fortunately) no longer allowed. Hence, in the immediate future, the growth perspectives for the Port of Tunis / Radès are greater than for ports in neighbouring countries, but on the long term, large-scale development of the site is not conceivable. Sooner or later, the lack of port capacity thus threatens to asphyxiate the economies of the Maghreb countries and despite the relative overcapacity of Western Mediterranean ports in general, the shortcomings are evident on the local Maghreb scale.

TangerMed, More than Just a Port

Morocco made an early diagnosis that has led to deep reflection on the country's role in Mediterranean trade and the possibilities for economic and industrial development offered by improved organisation of transport. The location of the Region of Tangiers on the Strait of Gibraltar and at the crossroads of north-south and east-west maritime routes immediately made it the obvious choice. At the same time, Morocco has benefited from a new dynamic following the arrival of the latest administration. The need for economic development of North-Western Morocco, deliberately marginalised over the past thirty years, has given rise to a project for overall economic and social reorganisation. The future TangerMed port is the cornerstone. Due to its geographic location, the diversity of facilities and infrastructures planned and the support it has from the Moroccan Authorities, the TangerMed port should certainly be considered a particularly innovative and ambitious operation.

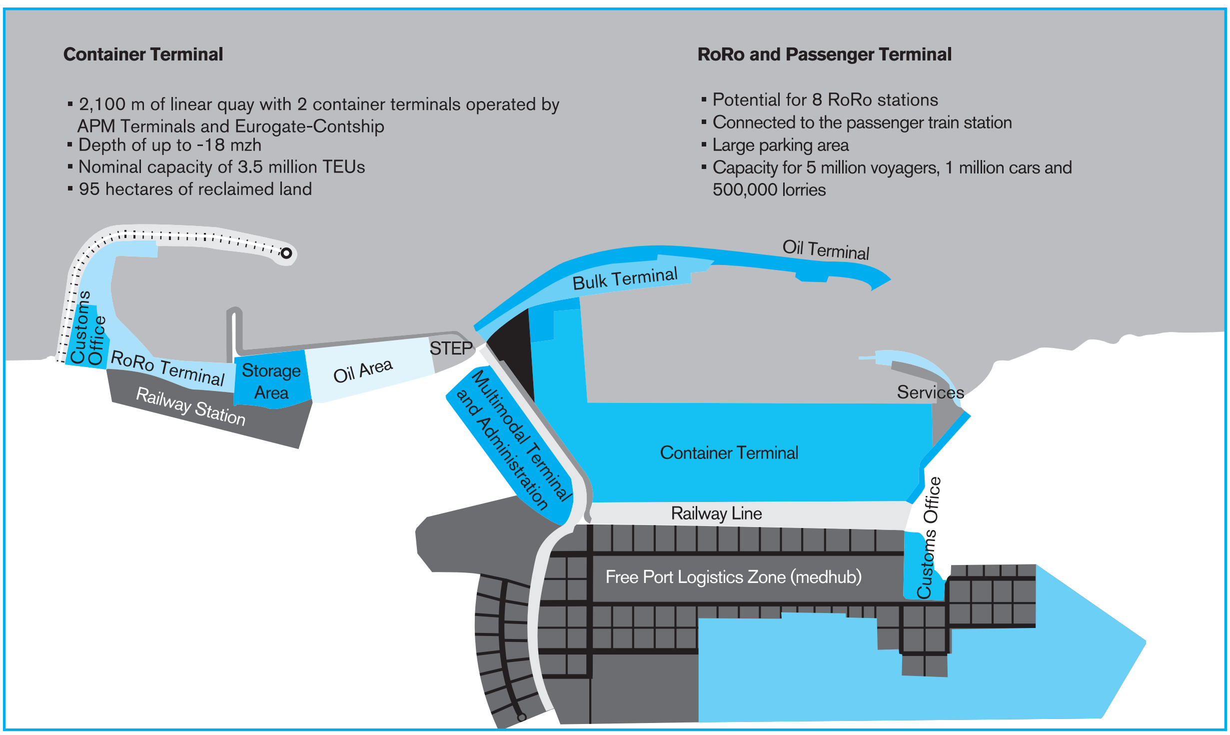
TMSA

The agency in charge of developing the special North Area and the TangerMed port, TMSA, has been granted exceptionally broad authorisation. As a public planning agency, it is responsible for the project's content and implementation. It is therefore the main authority granting operating licences for the various facilities and logistics areas to private companies. In charge of planning and development of the different logistics and activities areas relating to the new port facilities, it also has the status of planner / developer for these areas. As such, it can grant land areas the status of public utility and is therefore entitled to expropriate such land. As the authority in charge of operating, enhancing and developing the port terminals, it gains the de facto status of port authority for the implementation of the new port.

The TangerMed Port Project

The project for this special economic zone can be divided into several facets: a port facet, of particular interest to us here, and an industrial and logistics

MAP 4 **The TangerMed. I Part, Provisional Plan**



Source: Medhub/TMSA.

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facet comprising several areas in the Region of Tangiers. Certain facilities are yet to be built, whereas others already exist and are to be integrated into the new project.

The port premises proper, Tanger I since the announcement of the forthcoming Tanger II (2008-2012), comprises a bulk terminal for cereals, an oil terminal, a terminal for various merchandise, three container terminals with a logistics area and a rolling stock terminal. Since the initial stage of the project, the perspectives for obtaining operating contracts for the container terminals have aroused vivid interest on behalf of major private operators. The different tendering processes for operating the TangerMed port facilities have resulted in an unusual collaboration between the largest port operators of the Arab and European regions. Initially, two container terminals were envisaged, a third one being added to the project more recently. The quays have a depth of 18 m and offer a potential handling capacity of over three million containers.

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The first contract was awarded in 2004 to the joint-venture, APM Terminal (Maersk)-Akwa (a Moroccan group). The world's leading shipping company and its port operation subsidiary have been present at the Algeciras terminals since the early 1990s. In 2006, the management of the second terminal was adjudicated to a consortium involving Eurogate, a European stevedore (40%), and the following three maritime operators (at 20% each): CMA-CGM and MSC, two world-scale European containerised shipping companies and Comanav, a former national Moroccan shipping company today taken over by CMA-CGM. As in the first case, this second contract comes with a certain number of conditions (particularly in terms of minimum investments to be made over a specific period of time) and was awarded for the duration of 30 years for the development and operation of the terminals. Nonetheless, it contains a particular stipulation the other does not: the second consortium has committed to create regional maritime companies and organise feeder services from its terminal. Indeed, one of the fears of the Moroccan Authorities was that the facilities would be entirely employed for transhipment operations involving containerised Asian traffic without regional repercussions, in particular for local maritime companies.

A second way of preventing this possible diversion of positive port investment repercussions consists in creating logistics and activities areas primarily in free port zones. The first free port zone – located directly behind the container terminals – is the Medhub area, jointly managed by TMSA and Jebel Ali Free Zone International (Jafza), the operator of the Dubai logistics area. It is dedicated to logistics and post-production of goods on their way to European markets. After being processed, these flows are distributed in Europe directly at the place of sale or to regional distributor warehouses via truck from the rolling stock terminal of TangerMed. All passenger ferry line and RoRo (roll on/roll off) traffic currently at the Tangiers city port is to be moved to the TangerMed rolling stock terminal. New development is expected in the Strait on the Algeciras side to absorb the foreseeable growth of rolling stock traffic between the two ports. Other zones are located beyond the mountainous shoreline area and will be developed either for industrial production activities – here also, the European markets are the target – or for logistics operators targeting the Moroccan market.

TangerMed is an attempt to successfully implement a difficult equation: creating added value for Morocco while attracting containerised traffic without infringing upon the market share held by extant Moroccan ports, Casablanca foremost. In other words, the aim is to create economic activity based on goods flow without links to the Moroccan hinterland. To this end, and in order to protect the activity of other ports (which are, moreover, under another port authority, the new ANP, or National Port Authority), the portion of TangerMed traffic destined to the national market has been voluntarily limited to 15% of the total, but the operators and TMSA are already

calling for increasing this percentage. And finally, for the oil terminals, the contract was awarded to a consortium consisting of a Moroccan company, a Kuwaiti operator and an operator from the United Arab Emirates for a duration of 25 years. The last contract awarded to date was that of towage, going to Bourbon SA, a French tug company with a particular presence in Le Havre.
The implementation of the TangerMed project was entrusted to a special ad-hoc agency and not to the ODEP (the Moroccan Ports Office), which at the time (2002) combined the attributes of port authority and port services provider (monopolising ship handling). The creation of TMSA and TangerMed introduced, in effect, a certain competition on Moroccan territory and certainly accelerated the port reforms undertaken at the same time by the Moroccan Authorities. In December 2006, the ODEP was split into two entities – the ANP, or port authority, and SODEP, the port operating company, which would thenceforth be exposed to the competition of other operators for handling services. Though the two events should not be confused, their concomitance can be celebrated as a positive occurrence.

Geo-strategic Positioning: A Challenge that Has Nearly Been Met

Located on the Strait of Gibraltar where the distance to Europe is the shortest, the TangerMed port enjoys an exceptional position:

1 It is located at the crossroads of a number of maritime routes: all ships navigating from a Northern European or Eastern Atlantic port to Asia, the Mediterranean or the Indian Ocean must use the Strait of Gibraltar and pass the TangerMed port. This seems like an ideal location for a hub port as discussed earlier. The precocious development of Algeciras along these lines confirms this idea.
2 A 30-minute crossing suffices to cover the 16 km separating it from the Spanish mainland: it is the short maritime link in a nearly uninterrupted route between Northern Africa and Europe.

The port of TangerMed may seem the exact replica of the Spanish port of Algeciras on first glace. Nonetheless, a more in-depth examination will reveal that the two ports cannot be compared insofar as hinterland service. Indeed, the port of Tangiers is designed to combine the functions of hub port and main port: it will partially supply Morocco, it also has the ambition of attracting the logistic and industrial activities for an extensive Western European clientele, but it is primarily designed as a transhipping port at the crossroads of East-West and North-South lines and is in a good position to provide regional service to the Maghreb and Western Africa.

The Project's Weak Points:

The project has remarkable qualities and the preceding paragraphs confirm the solid grounds of the arguments justifying it. Nonetheless, despite brilliant development perspectives, TangerMed also raises some doubts concerning its consequences.

The erosion of the massif and water runoff will certainly increase due to the creation of terraces and road infrastructures

The Environment:

The port site is particularly constrained due to the lay of the land. The creation of terminals has entailed large-scale construction work: the mountainous coastline was literally razed and terraced so as to house the infrastructures and surfaces necessary for a major rolling stock port and a likewise major container port. The rock extracted during this work was obviously thereafter used to create the land for the terminals. Future expansion of the original terminals would certainly involve work on a similarly large scale. The impact of this development work on the surroundings is far from neutral: the coastline's configuration will never be the same, the erosion of the massif and water runoff will certainly increase due to the creation of terraces and road infrastructures.
Slightly inland, activities and logistics zones threaten to begin expanding in an uncontrolled manner along the new road infrastructures, rendering the organisation of urban services difficult. Another problem is the increase in road traffic that the port could cause on both the local level (trade between

local areas will most certainly increase) and the national level, as the main labour and population reserves of Morocco will be partially supplied by TangerMed.

Road traffic should also increase significantly in the direction of Europe since the direct supply of European markets (France, Spain, Portugal, Italy) is one of the project's core development concepts. Will the European Union accept more heavy transport in transit on its roadways, especially if this traffic is associated with a delocalisation of its logistics activities beyond its territory? One could hope that the Moroccan and Spanish road transport agencies will manage to create innovative intermodal services along the lines of those existing between Istanbul and Austria, which combine maritime and railway transport.

Security:

The TangerMed complex could eventually channel an essential amount of Morocco's commerce with Europe and a significant part of its trade with the rest of the world. The convergence of flows towards TangerMed could paradoxically make access to Morocco more fragile by creating a heavy dependence on a single gateway.

The Strait of Gibraltar is currently one of the main crossing points for illegal immigration influx to Europe from Northern and Sub-Saharan Africa as well as for the illicit distribution of products derived from cannabis. This situation, which has prevailed for a number of years, has led to a tightening of controls on port transit and greater surveillance of vehicles and other cargo units going to the EU countries. Despite the pressure placed on them by the police, people attempting to emigrate, at times spending months waiting, do not seem discouraged. The situation remains uncomfortable and tense in Northern Morocco and one can legitimately wonder whether the precautions taken to organise secure port traffic will be enough to guarantee an uninterrupted connection across the Strait.

Collateral Socio-Economic Damage:

The creation of manufacturing zones in the vicinity of TangerMed, the displacement of port activities from the city of Tangiers proper and the partial taking over of Moroccan intercontinental containerised traffic by TangerMed will certainly have an impact on the region: relocation of existing activities should be assisted as should the creation of new activities. The city of Tangiers will clearly be the most affected but certain industrial cities such as Casablanca should also be concerned.

What Opportunities Are There for Other Ports?

Despite its exceptional location, TangerMed will most likely not attract freight from far beyond Morocco's borders. The attraction of Tunisian freight, considering the road distances as compared to maritime routes, does not seem very feasible. The situation of Algeria is different: Algerian ports are doubtless under-equipped, but the distances are great. Nonetheless, the improvement of road infrastructures, in particular the start of construction work on the Trans-Maghreb Motorway, opens perspectives for TangerMed, if not for European freight, at least for maritime containers.

At present, the container hubs of the Western Mediterranean are operating at overcapacity. Numerous ports have seen their traffic stagnate for several years now in this part of the Mediterranean while hinterland-supplying ports are being equipped with the latest technology. This situation should not go on much longer. One can definitely assert that containerised maritime transport has a significant growth capacity, though it is uncertain whether a threshold will be reached on the short or medium term.

Nonetheless, are there future opportunities for similar ports in neighbouring countries? Will the forthcoming container hub ports in Tunisia – the Enfidah Project is now being studied – and Algeria – the former steel port of Djen-Djen is being considered, as it already has quays and road and rail connections – gain a similar position to that of TangerMed? Certainly not with regard to geographic location, so advantageous in the latter case. A thorough examination of the real positive effects that a hub port could have on the local economy with respect to the often colossal development such a facility requires is called for.