

An Overview of Maritime and Terrestrial Infrastructures in the Mediterranean Basin

Panorama

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246

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The Mediterranean Transport and Logistics Forum held in May 2010 in Barcelona opened with a session entitled: "Winds of Change for Mediterranean Infrastructure." Has the time come for transformation in an area so often characterized by a certain resistance to change due to the delicate political situations in many countries along the Mediterranean?

There are two predominant trends that can currently be observed in the Mediterranean Basin. The first concerns the position held by the region within the new world economic geography. A crossroads between East and West, the Mediterranean is above all an area of transit for world trade. In the face of the intensification of EU-Asian trade and the container and logistics revolution occurring over the past two decades, numerous port creation or expansion projects have seen the light throughout the Mediterranean coastline, overturning the existing balance of power between North and South Mediterranean ports.

The second trend is partially in opposition to the first, prioritising proximity and a regional definition of the area. The European Neighbourhood Policy's Regional Transport Action Plan (RTAP) 2007-2013, initiated by the EU in cooperation with non-EU Mediterranean shoreline countries, aims to consolidate and intensify cooperation and exchange in the Mediterranean Region in the sphere of transport. How does this plan, now at midterm, translate insofar as infrastructures?

This article is intended to provide an overview, not only of the maritime infrastructures in the Mediterranean Region in 2010, but also of terrestrial ones, since a port cannot be fully understood without its

hinterland. It will also place them within the context of the economic crisis.

The aim is to present the rationale behind the evolution of infrastructures observed in the Mediterranean Region over the past two decades, organized as replies to three questions: What are the main characteristics of the Mediterranean transport system? How does this area fit in the worldwide container and logistics revolution? How has regional transport policy affected the area insofar as infrastructure?

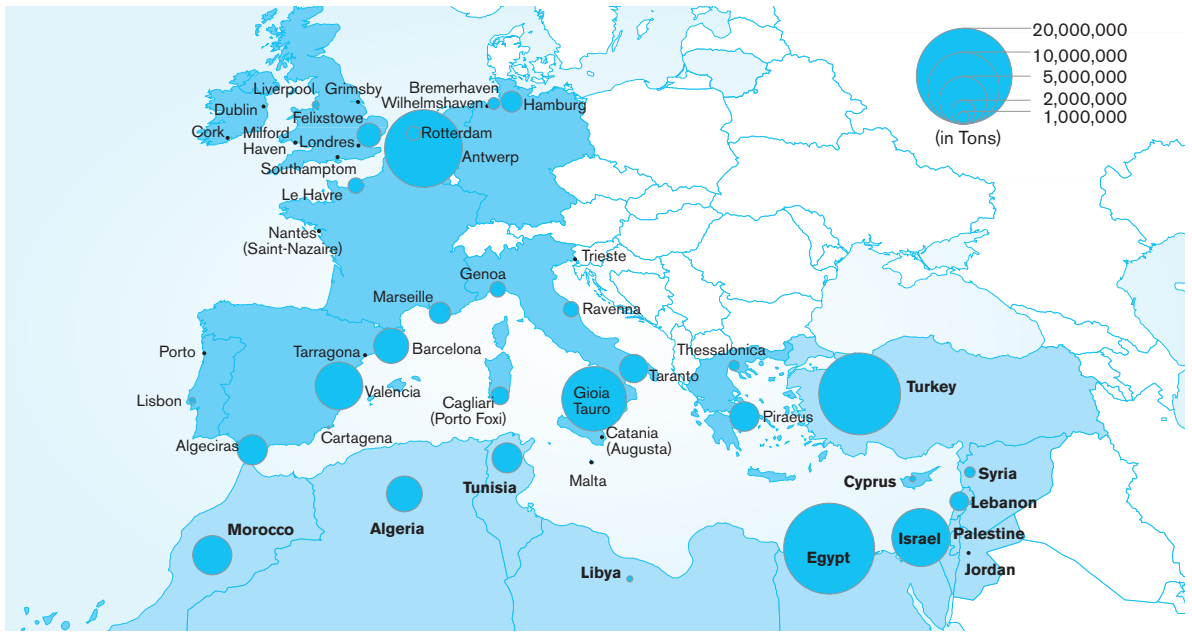
Characteristics of the Mediterranean Transport System: Significant Productivity Reserves

The Port: A Key Actor in the Mediterranean System

Registering a low intra-regional trade rate in comparison to other large regional ensembles of the world, the Mediterranean Region is above all an area of major maritime transit for world trade between Asia and Europe (Y. Crozet, F. Laroche, 2009). A large part of the energy and container trade that reaches Northern European ports travels through this area.

Therefore, in this Mediterranean area composed of islands and straits, 95% of international trade among coastal countries is transported via maritime routes. The remaining 5% consists of land transport flows concentrated near the Bosphorus and Gibraltar. With regard to terrestrial commercial transport, the majority is done by road whereas rail transport, more common on the northern shore than on the southern one, remains minor.

Such a situation makes the port a key actor in the Mediterranean land and sea transport system. In any case, in order to analyze ports and their performance, the efficiency of their hinterlands must also be considered. For, though the position of Mediterranean



Source: LET, F. Laroche 2009. Eurostat Data.

* This map concerns the ensemble of goods loaded and unloaded at ports in the given countries. Transit freight is thus included.

ports in the geography of world trade is propitious to their development, a likewise significant factor is the quality of their connexion with the hinterland, often deficient in ports of the region (congestion in both road infrastructures and at ports, among other problems).

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The Southern Coast: Isolated Networks and Scarce South-South Trade

The near inexistence of trade among the different Mediterranean partners on the South shore is a major obstacle to regional development (only 5% of intra-Mediterranean trade involves South-South trade), contributing to anchoring the two shores to the North-South trade dynamic (95% of trade). In any case, though this obstacle is primarily of a political order in south-shore countries, it is also a technical problem and concerns both north-shore and south-shore countries. In the South, national networks re-

main captive within impermeable borders with no connections to neighbouring networks (completion of the Trans-Maghreb Motorway, a long-term project programmed for 2011, is taking more and more time, particularly with regard to border sections). In the North, on the other hand, even if borders no longer officially exist, several problematic points persist, essentially in the railway transport sector (problems with interoperability and reform of railway freightage), making logistics chains lose efficiency and slowing the circulation of goods.

Mediterranean Ports in Northern Europe?

Finally, as far back as 2007, a significant part of intra-Mediterranean traffic was circumventing the “ports of entry” of Southern Europe, attracted by those of the North (Le Havre, Antwerp and Rotterdam), indicating the lack of efficiency of Mediterranean ports and their hinterlands both in the North and the South. Hence, one cannot only point a finger at poor performance in south-shore countries. The European Mediterranean port system can also be singled out for its shortcomings, since part of its would-be traffic is diverted towards the North Sea to later return to its natural area of influence via rail. By way of example, 51% of containers imported to the Rhône-Alpes Region in 2006 transited via the Northern European area and not through Marseille, though the latter is much

closer, according to a 2006 report by the French Court of Auditors.

Hence, with regard to infrastructure, the Mediterranean port system generally suffers from a proven lack of efficiency. This weak point is due to both significant shortcomings at ports (lack of storage space, dearth of gantry cranes, etc.) and the fact that hinterlands are often geographically remote and poorly connected to their ports.

This situation has, however, evolved for the better in the past few years at numerous ports in both North and South. And though trade continues to use the traditional Northern European route for the time being, a new geography of trade could emerge in the forthcoming years under the impulse of new investment in infrastructures and regulatory modernisation carried out in the majority of partner states.

The Mediterranean, a New World Hub?

The Mediterranean offers significant logistics opportunities. Ideally located near the European market and containerised flows, it is easy to get added value from this trade through cross-dock, feeding or final processing operations.

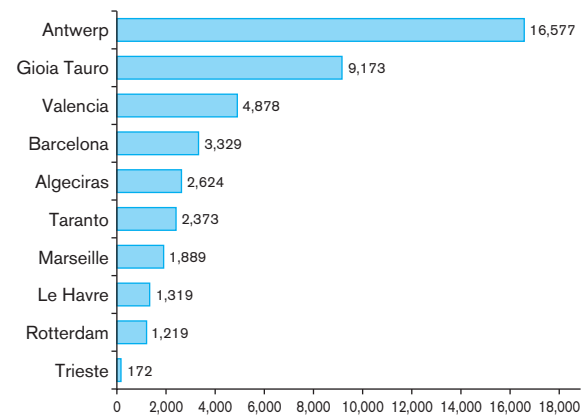
New Logistics Revenue in Vogue among Investors

This dynamic has not stopped since the beginning of the 21st century, a period when investment in transport and logistics in the Mediterranean Region made a comeback (it was the second sphere of investment after energy in 2007, according to the ANIMA Investment Network).

More precocious in the North than in the South, they have marked the onset of a regional specialisation in containerised traffic, leading to significant adaptation of existing ports and construction of new ones capable of handling larger ships (terminal extensions, new gantry cranes, etc.). Apart from Spanish ports, the best example of this new generation of ports is Gioia Tauro, at the tip of the Italian "boot." Inaugurated in 1995, it only took 10 years for it to take the lead as the top container port in the Mediterranean (nearly 9 million containers handled in 2007, according to Eurostat), jeopardising the traditional leadership of such Mediterranean ports as Marseille and Trieste. Specialised in RoRo cargo and oil products and having to deal with high degrees of inertia, ports of the preceding generation have seen their share of the

CHART 16

Ranking of 10 Top European Ports according to Containers Loaded/Unloaded in 2007



Source: LET, F. Laroche, 2009; Eurostat, 2007.

market eroded to the benefit of new ports that are more flexible and better adapted to the demands of world trade.

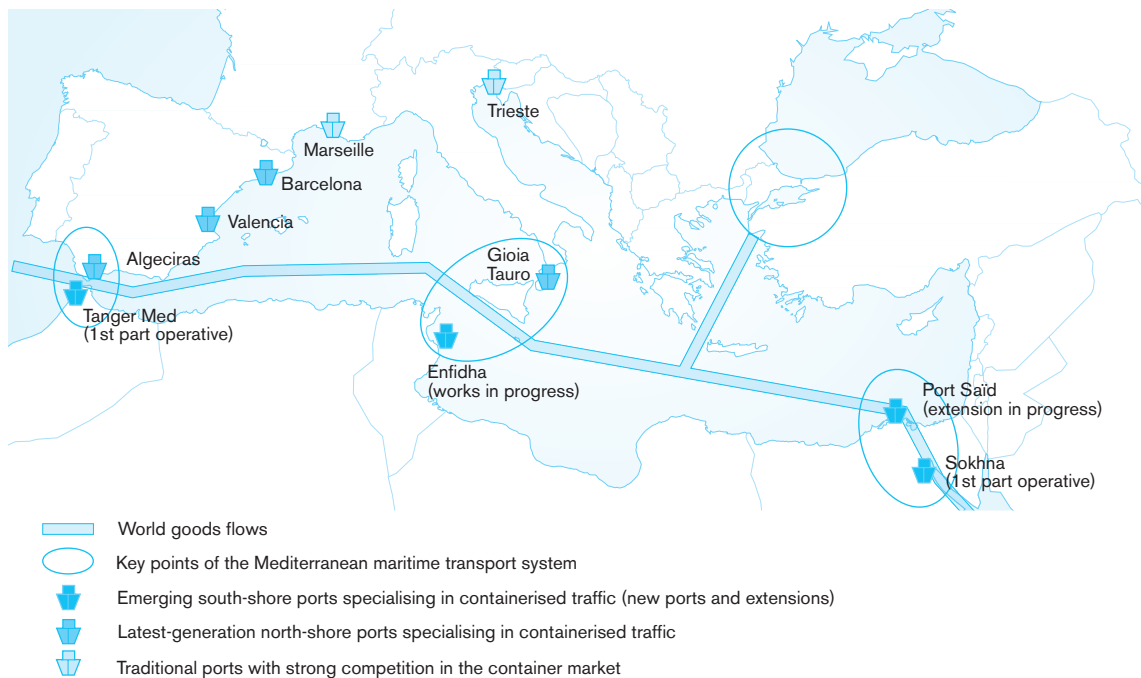
Over the past decade, new actors in the North, ahead of those in the South, have shattered the inherited port hierarchy. However, the year 2010 marks a new stage, with a South Mediterranean port first appearing among the top 10 Mediterranean container ports.

The Emergence of High-Performance Ports in the South

Ports in the South are catching up to European ports in terms of capacity and logistic performance thanks to "megaprojects."

The Tanger-Med port (near Tangiers), the most visible of all, inaugurated in 2007, should attain a capacity of 3 million containers by 2013 (and 8M eventually). Built from scratch, this port was supposed to reach a level of container traffic equivalent to the port of Marseille by the end of 2009, despite the crisis (*Les Echos*, 22 July 2009), testifying to the power of attraction of these new projects in the South. Other, likewise important projects are being completed (extension of Port Saïd and the new port of Sokhna in Egypt) or developed (Enfidha in Tunisia). Generally speaking, nearly all other ports from the Maghreb to the Balkans have undertaken work to upgrade their infrastructures as well.

Therefore, though the ports on the North shore have a geographical advantage as points of direct entry to the EU, the south-shore ports have the advantages of being located on the mega-containership route, offering less costly services and above all, offering high-tech logistics services at recently-built port



Source: F. Laroche, 2010.

infrastructures whose goods are essentially destined for the European market.

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In sum, this scrambling of port hierarchy is made possible by both public and private investment. The general structure of the Tanger-Med port was carried out using public funds whereas the development of its terminals was left to private operators (CMA-CGM, Eurogate-Contship, Renault, etc.).

Counterproductive Investment?

The container enthusiasm should be moderated: first of all, the crisis has demonstrated that it is not an inexhaustible source of revenue and that its growth is somewhat questionable; moreover, capital on international markets is no longer as significant and a number of projects have already been threatened over the past few months by a freeze-up of investment. In any case, beyond the crisis and funding issues, spec-

ulation on containerised transit could prove to be counterproductive.

Simple transshipment of containers provides little employment and moreover, the race for higher capacity could lead to a situation of over-capacity in the Mediterranean. In view of the current crisis, the risk would be to discover an asymmetry between the capacities developed to attract world flows and real local needs, threatening the profitability of numerous investments. It is thus necessary for Mediterranean actors to seek out a dynamic whose economic effects would at least be equal to those obtained by transshipment activities in order to reduce their dependence on the rest of the world and ensure the durability of the investments made. In the case of a situation of over-capacity and excessive specialisation of ports, an increase in competition among the different port areas could ensue, which would contribute to further dividing an area already suffering from a lack of unity.

A Project for Political Union through an Integrated Logistics Area

Integration to Improve Logistic Performance

In an area divided up by different policies and competition among ports for control of goods flows, the

European Union, in coordination with Mediterranean partners, upholds a policy of cooperation based on fostering effective logistics corridors contributing to structuring the Mediterranean Region. These principles were recalled at the Paris Summit (2008) held to establish the Union for the Mediterranean: "The development of motorways of the sea, including the connection of ports, throughout the entire Mediterranean basin, as well as the creation of coastal motorways and modernization of the trans-Maghreb rail link, will increase the flow and freedom of movement of people and goods."

As part of the 2007-2013 Regional Transport Action Plan, these declarations were given form through the extension of the Trans-European Transport Network (TEN-T, 1996) to the Mediterranean Region and the establishment of the MEDAMoS programme to foster the development of Motorways of the Sea (MoS). Combining land and sea areas, this concept is essential in the Mediterranean Region. It allows the maritime sphere of North-South corridors to be integrated into logistics chains, ensuring the regularity of transport lines, the interoperability and the flexibility necessary to ensure smooth flows, good performance and the continuity of service on land. (SIAROV, Vesselin. *Pertinence et potentiel de l'intermodalité dans la région de la Méditerranée et de la mer Noire*, 2004. See Figure 17; www.nestear.net/Docs/INTERMODALITE_MED.PDF.pdf)

Two cases have been chosen to illustrate the concept of good logistics performance and its effects on a given area.

The Motorway of the Sea between Turkey and Italy Poses a Challenge to Land Routes

The maritime line connecting the ports of Istanbul, Ambarlı and Çeşme (Turkey) and Trieste (Italy) became a "Motorway of the Sea" before the fact. Developed by the UN Ro-Ro Inc Group in 1992 following the blockage of the land route through the Balkans due to the Yugoslav War, its success has continued even after the end of the conflict, the extension of the EU to the Turkish border via Bulgaria and Rumania in 2007 and the modernisation of Balkan roadway networks.

The success of this service can be ascribed to several factors:

- Frequency of ships adapted to the needs of road transport (weekend transport);

- Combined road-rail transport service from Trieste to Salzburg, inaugurated in 2005 (crossing the Alps in 9 hours and delivery of merchandise as early in the week as Monday);
- Partial free trade agreements made between Turkey and the EU on manufactured goods (1995).

This maritime line, the essential link in an intermodal logistics chain using road and rail, is considered an example to follow for the development of other international and intermodal lines in the region. With 91,815 vehicles transported in 2004, as compared to 73,947 in 2001 (up by 24%), it attracts 58% of traffic between Turkey and the EU, which attests to its effectiveness over the land alternative.

Lending Logistics the Role of Territorial Planning and Development: The Example of the Tanger-Med Hub

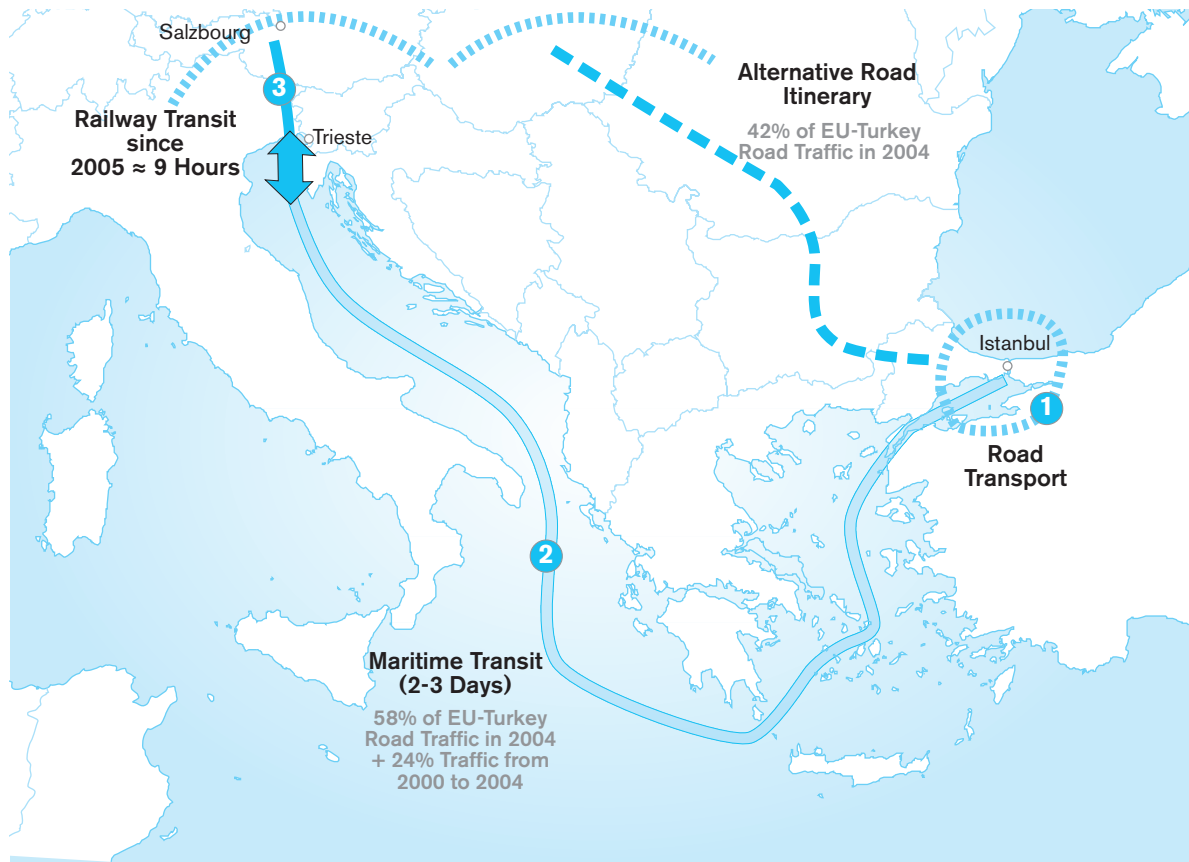
Tanger-Med represents more than a simple transshipment hub with a global vocation for the Moroccan authorities. Two territorial development policies have been defined, the implementation of an infrastructure plan and the encouragement of industrialisation.

A vital factor for South Mediterranean Countries, projects for new freight railway lines and high-speed railway lines are underway in order to connect the port with the Morocco's remaining economic activity. Moreover, in addition to the modernisation of the local roadway network, a project for the modernisation of the Rocade méditerranéenne, the coastal motorway from Tangiers to Nador, which should eliminate the isolation of a region that has remained peripheral due to its mountainous topography (Rif Mountains).

The authorities have also launched a major programme of local industrialisation by establishing free zones, thus improving the advantages of the port and the proximity of the new rail, road and airport infrastructures.

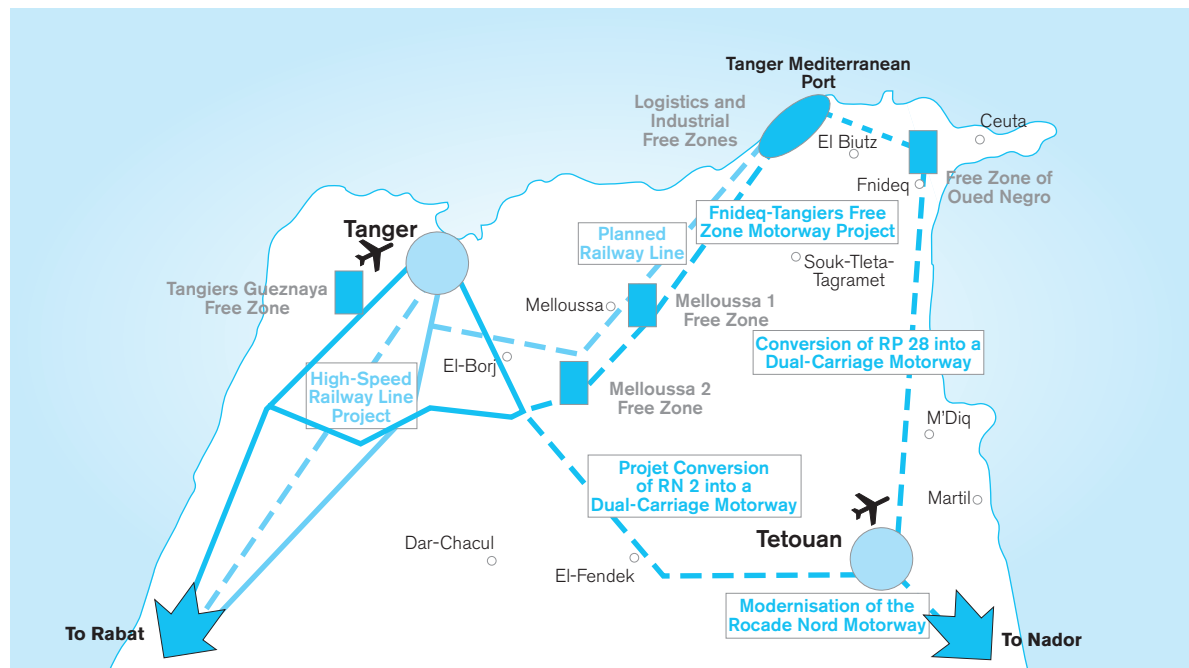
More than a port, Tanger-Med is thus a tool for territorial planning and development which should eventually create over 100,000 jobs, allowing a region that was peripheral until now to become a real economic motor, taking advantage of world goods flows and the proximity of European markets.

MAP 4 Organisation of the Turkey-Trieste Intermodal Line



Source: F. Laroche, 2010.

MAP 5 The Tanger-Med Port and Development of its Immediate Hinterland



Source: F. Laroche, 2010.

**“The Mediterranean is a sea that joins,
not separates, its people.”
(Paris Summit Declaration, 2008)**

The “winds of change” evoked in the introduction are thus of various types in 2010:

- The container revolution means rapid development of projects to upgrade the appropriate infrastructures and the advent of a new logistics industry;
- The opening up of economies to world trade lends ports their primacy in the Mediterranean system;
- The renovation of ports entails a process of hinterland and infrastructure modernisation.

There are thus two interrelated trends. The renovation of ports encouraged by revenue from world goods transit leads to a spread of upgrading programmes from seafront to inland areas. An economic tool, transport likewise plays a role in territorial planning and development and in spreading wealth and growth, a prerequisite for economic convergence. However, all political and economic actors in the region are well aware that the future of the Mediterranean depends above all on the development of South-South regional ties, which is contingent to political will. This conclusion in favour of regionalism should not be considered a failure or rejection of the globalisation process, but rather a necessary step in the strengthening of the Mediter-

ranean Region and its internal dynamics so that it can take up a sustainable position on the global stage.

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