## THE PORT OF PIRAEUS ENTERS THE NEW MILLENIUM

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480 BC: The Athenian fleet of Themistocles demolishes the Persian fleet of Xerxes in the naval battle of Salamis, a battle that will shape the evolution of the Hellenic and Western civilizations.

1999 (about 2,500 years later): In roughly the same stretch of water, a 4,000 TEU containership berths at the Eleftherios Venizelos container terminal. The vessel operates on a trunk route that links Northern Europe to the Far East, with feeder connections to the East Med, the Adriatic, and the Black Sea.

There is clearly as much resemblance between classical times and the dawn of the 3<sup>rd</sup> millenium as there is between a trireme and a hatchless containership. However, geography aside, one parameter is the same in both cases: The role of Piraeus as a port of national and international importance. This is a role that Piraeus held many times during the course of history, and is eager to keep alive as it prepares for year 2000 and beyond.

Under the leadership of Themistocles, Piraeus developed as the port of the city of Athens, linking the future of Athens with its own. Long fortification walls were built to connect the two cities. Piraeus grew rapidly as a commercial, shipbuilding and naval base. During the "golden age" of Pericles' Athenian Democracy, Piraeus developed further, both as an urban center and as a port. Of particular importance was the port's infrastructure and organizational system, both of which were designed to cope with the demands of the time.

The walls were destroyed later by the Spartans when they won the Peloponnesian war against the Athenians. From this point, there came a lengthy period of decline for Athens and an even worse one for Piraeus. Under the Romans, the Goths, the Venetians, and later on the Turks, Piraeus was considered insignificant and even lost its traditional name after the 14<sup>th</sup> century.

Piraeus resurfaced as a city after Greece's war of independence with Turkey. The government began reconstructing Piraeus and refugees from islands such as Chios settled into the area around the harbor. Further waves of Greek immigrants from Hydra, Crete and the Peloponnese in the 19th century and from Asia Minor in 1922 brought Piraeus' population to more than 200,000.

The city's new inhabitants placed a lot of emphasis on industry and commerce. This, combined with the advent of the industrial revolution, saw Piraeus earn an international reputation as an industrial city. An important factor behind all this progress was the presence of port facilities. To cope with increased demands on these facilities, a more structured form was given to port organization. Thus, the Piraeus Port Authority (PPA) was established as a public institution in 1930 by premier

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Eleftherios Venizelos.

Piraeus was heavily bombed during World War II and much of the city and port had to be rebuilt all over again. An extensive reconstruction program saw the port reclaim much of its traffic and grow during the 1950s. This effort was helped to a large extent by new legislation in 1950, which provided for a new port organizational structure. The basic elements of this legislation remained in place for the next 48 years, and some of them are in fact still in force.

In the 1960s, 70s and 80s, the port grew steadily. With the dawning of the container age in the early 70s, a gantry crane was purchased and a gradual shift from conventional to container operations evolved. The importance of containers was recognized and a new dedicated container terminal was built at Neon Ikonion, west of Piraeus passenger port. The largest pier in that terminal (Pier II) was named after Eleftherios Venizelos.

During the 1990s, traffic grew steadily, especially in the container sector, but also in the passenger department, in which Piraeus clinched the No. 3 spot worldwide. Much of the investment focused on the container terminal, with a total of 10 gantry cranes in operation in 1999 and two more and a mobile crane under order. The European Union's Cohesion Fund and a loan from the European Investment Bank financed much of these developments.

In spite of these positive developments, it became apparent that change in the institutional structure of the PPA was necessary. In fact, even though the current institutional model served the port well for almost 50 years, it was also clear that this model would be too slow a vehicle for further port development in the future. Thus, new legislation was introduced in 1999, transforming the PPA into a Corporation. The State would initially hold all shares of this corporation, but a partial privatization scheme is envisaged later on.

Given these developments, what are the prospects for Piraeus as we are about to enter the new millenium?

Looking at a wider context as we approach year 2000, the Mediterranean basin promises to be as important as it has been in yesteryear. With the collapse of the Soviet bloc, emerging economies in three continents (Europe, Africa and Asia), such as the Black Sea, the Middle East, the Balkans, and Northern Africa will use the Med as their main partner in commerce. New developments in ship technology, cargo handling, and in the computer and telecommunications technologies will increase the cost effectiveness of maritime and intermodal transport. As a result, trade to and from areas adjacent to the Med is expected to grow strongly in the years ahead.

The trend in the last few years gives a flavor of what one may expect in the future. With the economies of scale realized by large containerships deployed on trunk routes worldwide, it is not cost-effective for these vessels to make direct calls in many ports. For this reason, lines develop hub and spoke systems, in which feeder vessels distribute containers to and from smaller ports, whereas larger mainline vessels connect only to larger ports ("hub ports"). In the Med, container lines use ports such as Algeciras, Gioia Tauro, Malta, Piraeus or Damietta as hub ports. The story of the Medcenter Container Terminal in Gioia Tauro is indicative, as this port was not even on the map in 1995, but via an aggressive expansion and pricing policy became the top Med container port two years later.

Even though this may have seemed unthinkable a few years ago, the record shows that Piraeus entered the club of Med hub ports in 1998. With 933,000 TEU in 1998 versus 685,000 TEU in 1997 and 575,000 TEU in 1996, Piraeus put itself on the hub map for the first time in its history. It also entered the list of 50 busiest container ports in the world, getting the 41<sup>st</sup> position in 1998. This was a result of a contract signed in November of 1997 with container lines MSC and Norasia.

Looking into the future, Piraeus knows very well that intermodality is the name of the game in world port competitiveness. It will be even more so in the future. No port will be able to acknowledge complete satisfaction from its customers if its intermodal interfaces cannot function in a seamless fashion. Connectivity to major rail and road networks will be a plus to those ports that have it and a minus to those that do not. A container terminal will benefit if it is linked to the rail network because by doing so its effective hinterland gets larger.

For Piraeus, which does not currently have a rail connection, such a plan exists, and it is expected to be implemented within the next three years. The Eleftherios Venizelos container terminal will be linked with a marshalling yard at Thriassio Pedio and then on to the national rail network.

Similarly, a port that handles huge numbers of passengers will be handicapped if its function is not integrated within a good urban or suburban transport network. For Piraeus's huge passenger traffic, good links to the bus and the metropolitan railway networks are critical. These links currently exist, but they were definitely not designed to handle the traffic they do these days and therefore they should be redesigned.

The establishment of Trans-European Networks (TENs) is expected to play a key role in the development of ports that are components of the TEN structure, and Piraeus is one such port. For Med ports, this could also increase the share of traffic that has one of its ultimate endpoints (origin or destination) in a Central European location, traffic that would otherwise pass through a Northern European port. In that respect, Gioia Tauro would compete with Rotterdam or Hamburg for cargoes from the Far East to countries such as Austria and vice versa. As currently many cargoes completely bypass the Mediterranean, it is expected that the development of intermodal connections in Med ports might help reverse this trend.

It is clear that no intermodal connection can guarantee a smooth flow of goods if the flow of information used by the parties involved in the intermodal chain is not smooth as well. Already most of the partners in Med ports use Electronic Data Processing systems for invoicing. Other software applications for improving activities such as berth allocation, yard management, export and import clearance, dangerous goods management, cargo tracking and tracing, are used to a varying degree by all port authorities.

However, times are changing. Ports are increasingly investing in advanced

information technologies, including the use of the internet, for all kinds of transactions. Many container terminals already use sophisticated software systems, and this has had a dramatic impact on their competitiveness. Ports are also increasingly participating in innovative R&D projects in the areas of transport, telematics, and communication and information technologies, such as those funded by the European Commission. Such collaborative R&D projects (thus far mainly in the 4<sup>th</sup> Framework Programme, and from now on also in the 5<sup>th</sup> FP) will form the basis of long-term development in the area of information exchange between ports and their partners and will enhance intermodal integration in the future.

The PPA is totally committed to this goal. In addition to being involved in many of the above R&D projects, it is currently implementing a new information system – the Port Management Information System (P-MIS), in a way that it will cover not only today's procedures and operations, but will also have room for expansion for future needs of the port. The container terminal software is expected to play a critical role in such a development.

Another area which is critical to the Piraeus port competitiveness is pricing. The European Commission's "Green Paper on Ports and Maritime Infrastructures", presented and discussed in Barcelona in May of 1998, has issued some principles to be adhered to as far as port pricing is concerned. One of these is the "user pays" principle, meaning that prices that are charged to port users should reasonably reflect the full costs of the services rendered. A related principle is that of "transparency" in port charges, meaning that a port charge should be clear as to what it entails and how it is calculated. Elimination of state aids, or other forms of subsidy, is considered a related desirable goal.

Such principles may be reasonable and easy to state, but more difficult to implement than it would seem at first glance, and a debate on this matter is ongoing within European port industry circles. For instance, it would be unfair to apply the user pays principle to a port in isolation. It would be equally unfair to apply this principle only to the port sector, and not to other modes of transport linked to ports.

Still, and in spite of the above difficulties, in 1997 Piraeus introduced new tariffs on transhipment that were very successful in attracting new traffic. It also introduced new tariffs for coastal and cruise vessels. Tariff reform is continuing, and recently a proposal for drastic tariff simplification has been approved.

In view of 2004, the year the Olympics will come back to Greece and also the year of coastal shipping deregulation in Greece, the port of Piraeus will be asked to accommodate significantly more traffic than it handles today. To that end, extensive infrastructure development is foreseen, much of it to be financed by the European Union.

All in all, the recent transformation of the PPA into a Corporation could not happen at a better juncture. The move will help the port become more flexible and develop aggressively as it prepares to face the challenges of the new millenium. Facing these challenges successfully will make the port worthy of its predecessors in the Themistocles, Pericles and Venizelos eras.