

WAITING FOR 2004

by **Harilaos N. Psaraftis and Apostolos D. Papanikolaou**
Professors, Department of Naval Architecture and Marine Engineering
National Technical University of Athens

An ageing fleet. Overbooking of tickets. Traffic jams, chaos and fights at quay side. Ship garages full of exhaust fumes at disembarkation. Ports with no toilets, no phones, no taxis, no waiting lounges. People packed on ships like sardines. Impossibility of booking a return ticket. Hassle and discomfort for the traveller, especially during the summer. A Byzantine institutional structure. An environment hostile to innovation and change.

As Europe heads toward the 21st century, Greece's coastal shipping system occasionally reminds the middle ages. And waiting for 2004 (the projected date of full deregulation of the market) sometimes sounds like waiting for Godot...

If criticizing the shortcomings of the present system sounds facile, recommending alternatives and ways to improve it is challenging, to say the least. For starters, finding good statistical data on the system is a formidable task, and the analyst is constantly reminded of the GIGO principle (garbage in, garbage out). As an example (and there are many), the latest official shipping statistical data compiled by the National Statistical Service date as back as 1986. Passenger and freight traffic data up to 1990 have just been tabulated by the Ministry of Merchant Marine, although their tables are filled in by hand. No comprehensive traffic data for 1991 and beyond are available as of yet. Some shipping companies do keep computerized data, but here the problem is the opposite: Little or no data prior to 1991 or 1992 can be found into their databases, for most of these systems are very recent. Last but not least, there are serious discrepancies within the fleet and traffic data maintained by the Ministry.

So in a period when any serious analysis of the monumental changes that are about to take place in Greek coastal shipping would at least necessitate some decent data, there seems to be no sense of urgency by the responsible authorities so as to collect and classify data in a rational and reliable way. That task is conveniently left to the analyst.

The above difficulties notwithstanding, the National Technical University of Athens (NTUA) is currently engaged in a multidisciplinary research project on the status and prospects of Greek coastal shipping. The project, sponsored by the Hellenic Industrial Development Bank (ETBA), aims at identifying the main issues facing the system today and making some recommendations for the future. The removal of cabotage privileges in 2004 and the impact of new technology ships on traffic demand and modal split are two of the project's foci. While it is premature to talk about what the project is likely to recommend (the final report is due early 1994), we can at least give a flavor of some of the main issues.

Passenger fleet: For the bigger passenger/car ferries (over 1000 GRT), average age in 1992 was about 25 years, while in 1988 it was about 21 years. This means that in spite of the addition of new units, the fleet essentially has not been modernized in recent years. The bad news is that 25 is an average, and there are today ships that are 30, 40, or even 50 years old. The situation of conventional ships less than 1000 GRT is worse, as average age is 28 years. As a whole, the fleet is considerably older than equivalent fleets in other

similar European coastal markets, and this raises serious questions as to how these ships will be renewed within the 11 years remaining until 2004. New technology ships (hydrofoils and catamarans) are of course younger, with an average age of 15 years. [The good news for the conventional ferry shipowner who may feel embarrassed about ship age is that the situation of the Greek coastal cargo (feeder) fleet is much worse: The average age of the Greek coastal general cargo fleet (between 100 and 500 GRT) is 35 years. There are 72 ships between 40 and 50 years old, 190 ships over 35 years old, and about 50 ships over 50 years old!]

Port infrastructure. The explosive growth in traffic that was spurred by general economic growth and by the modernization of island port facilities in the last 20-30 years has in turn rendered many of these facilities obsolete and in urgent need of upgrading. As far as ferry traffic is concerned, the most pressing need seems to be the gross inadequacy of ports, not so much in terms of docks or piers, but rather in terms of road access and parking facilities. Such inadequacy makes loading and unloading of vehicles onto ferries a very painful operation, involving traffic jams at the streets in and around the port, and gridlocks and confusion at quay side. This phenomenon is observed not only at busy ports such as Piraeus, but also at island ports. The latter are frequently overwhelmed by vehicle traffic, especially if two or more ships want to use the port facilities at about the same time, something that is very common during the summer.

Other system features: In spite of the radical changes that have occurred in the system over the last 20-30 years (at least in terms of kinds of ships that operate in it, and in terms of passenger and freight traffic), there has been little change in the design of the network that serves the system. Official lines are still more or less the same, many still emanating radially from Piraeus, with little connectivity among islands that do not belong to the same main line. This situation renders island-to-island movement of freight and passengers cumbersome if both the origin and the destination of the movement are located on different "official lines". In such a case, the movement has to go through Piraeus, even if the two islands are adjacent. As an example, the distance between the islands of Paros and Sifnos in the Cyclades is less than 20 nautical miles, yet until recently the only service between these two islands was by the MARGARITA, a 20-meter wooden boat (passenger only) that only sails when the weather was good, and whose speed is less than 10 knots. In the summer of 1992 this situation was alleviated by the introduction of a passenger/car ferry, the PAROS EXPRESS, which now links the two islands (and many others in the Cyclades), but still not yet on a daily basis. Absurdly enough, the officially approved (second class) fare for this trip is 1469 drs for the MARGARITA and only 748 drs for PAROS EXPRESS. [Incidentally, the PAROS EXPRESS will be soon decommissioned].

What are then the prospects for the future? One can list a few factors that will be important as we move toward 2004.

1) New institutional environment. One of the parameters that is known in advance fairly well is surely the target of an effective European economic integration, expressed by the implementation of the Single European Market as of January 1, 1993, and further reinforced by the Maastricht accords.

Whereas the initial sentiment has been that the removal of cabotage privileges by 2004 could be bad for Greek shipowners and seafarers, until recently no one has seriously studied the problem so as to be able to fully assess the economic implications of such a development on the broad spectrum of players involved (passengers, shippers, shipping companies, tourism, regional economies, national economy, or Greek society as a whole). However, it is clear that as we move toward deregulation, there will be a strong need to find ways to increase the efficiency and the quality of service of the present system.

A second factor that will be important in the future comes from the Maastricht accords. Greece (along with Spain, Portugal, and Ireland) will considerably benefit from the "cohesion funds" stipulated by the treaty. One of the uses of these funds is to enhance the economic development of regions located at the EC "periphery," by (among other means) strengthening their links to regions closer to the center. If this happens, coastal shipping in Greece, along with the vital sea transport link to and from Italy, will benefit considerably by drawing funding for necessary infrastructure improvements.

A third factor that is not directly related to maritime transport but will certainly have ramifications for coastal shipping in Greece is the increasing deregulation of air travel in Europe. If foreign airlines are allowed to serve Greek islands (either from Athens, or directly from European cities), some of the passenger traffic that now prefers or is forced to take the boat may shift to air transport. Competition from air transport already exists in Greece. However, an increased deregulation of the airline industry is expected to further increase such competition, irrespective of whether or not the coastal shipping market is still internally regulated. This "external factor" will put even more pressure for the system to become more efficient in the future.

2) New ship technologies: advanced marine vehicles. Similar to international practice, there has been a steady evolution in the types of ships that sail the Greek seas, in terms of size, speed, and technology. A ship class that is not yet thoroughly tested, but for which there exists considerable interest is the category of "fast" marine craft, such as hydrofoil, SWATH, catamaran, wave-piercer, SES, air-cushion-vehicle (ACV), etc. The basic question is what is the future of these new ship technologies. The answer to this question could very well be critical for the future of the entire coastal shipping industry in Greece, because depending on how the answer goes, the picture of the system in the future could be dramatically different from what it is today (much in the same way the current picture is very different from what it was in the past). The NTUA project is running a specialized software package to analyze scenarios on how passenger demand is likely to split among competing modes (ferry, fast ships, and air transport).

A scenario that might conceivably be threatening for the future of conventional ferries in Greece is the possible introduction of ship designs that combine high speed and superior seakeeping performance, with an ability to carry vehicles. If such a design proves economically viable in Greece, it may attract a significant share of passengers travelling with their private cars, away from the conventional ferry market. If, in addition to that, truck freight is diverted from passenger ferries to specialized freight (ro/ro) ships (only three such ships currently exist), then the conventional passenger ferry fleet will be on a shaky ground in the future. Of course, these two "ifs" are really "big ifs." Although the two are not directly related to one another, it is perfectly possible that developments in one of them will facilitate developments in the other.

3) New transport network design and infrastructure. With the various kinds of pressure on the system toward a better efficiency and improved levels of service, it is only natural that this will ultimately translate into an improved design of the coastal transport network and into improved infrastructures.

Regarding the network, even a partial deregulation of the market (that is, with no immediate removal of cabotage privileges but with deregulation with respect to fares and routes) will result in the establishment of new routes, with minimal interference from the Government. The concept of "lines," as it is known today, may become meaningless for the overall fleet, although each individual company may very well establish its own main lines (which will not necessarily be the same with those of its competitors).

It is still premature to predict what a deregulated shortsea shipping network will look like, but it is very likely that it will be very different from the one currently in place. In the United States, airline deregulation

in the 80's radically transformed the air transport network from one with predominantly long-haul routes to a "hub-and-spoke" system involving passenger transfers. This does not necessarily mean that the same will happen in Greek coastal shipping (transfers are much more cumbersome when travelling by ship). However, one could very well envision a system where main destinations ("hubs") are served directly from Piraeus, and remote destinations are served by boats that originate from these hubs. In addition, a "mixed-mode" system may also evolve, where passengers could fly to the hubs, and continue their journey to their final destination using a high-speed boat. Then they could rent a car instead of bringing along their own. Some people already use such a method when going to remote islands in the Dodecanese (by plane to Rhodes and then by boat or hydrofoil to the islands nearby). Deregulation of air and sea transport will increase this mode of travel some more, particularly if the combination airplane-ship-car rental (and maybe hotel) is attractively packaged.

As finally regards infrastructure improvement, this is considered absolutely essential for enhancing the efficiency and the service quality of the system. Not only ports, but also basic services such as passenger/car reservations, ticketing, communications, and all related logistical services should be completely overhauled. Establishment of "integrated" services, either for passengers or for freight could take place. For instance, door-to-door shipment of packages maybe offered by a company that has integrated truck distribution with ro/ro ship operation. We predict that the combination of a deregulated environment, the new ship technologies, and EC financial assistance (cohesion and other funds) will bring about such changes sooner rather than later.

More on all this will be reported in detail when the NTUA project on coastal shipping will be concluded.