Challenges in European Short Sea Shipping

H. N. PSARAFTIS

Laboratory for Maritime Transport, National Technical University of Athens, Athens, Greece

ABSTRACT: A few years ago, this author had written several papers discussing, among other things, the status and prospects of Short Sea Shipping (SSS) in Europe. The present paper is an update of that work, focused on the SSS sector, and is written vis-à-vis recent developments in this and other related sectors. To that effect, the paper takes stock at the situation as regards European SSS and discusses challenges and prospects for the future. The analysis looks into both SSS in a strict sense and other sectors that are related to SSS, directly or indirectly, and that may have important ramifications to SSS development. These other sectors include ports, security and the environment. This paper attempts to explain the causes of current problems, and makes some suggestions on how to remedy the situation.

1 INTRODUCTION- BACKGROUND

The drive to promote Short Sea Shipping (SSS) has always been at the heart of the European Union’s Transport Policy. In the Commission’s White Paper “European Transport Policy for 2010: Time to Decide,” shifting traffic (mainly cargo) from road to sea has been adopted as a main policy goal, and specific actions are proposed to move forward towards that goal. As growth in European road transport has been recognized to create significant problems, such as congestion, pollution, noise accidents and others, these problems create significant ‘external’ costs, which are not reflected in the price of services rendered. According to the White Paper, the most recent estimate of the external costs of road congestion is 0.5% of Community GDP, something that will increase by 142% to €80 billion a year in 2010 (that is, approximately 1% of GDP) if no action is taken.

There have been a series of developments that, at least on first glance, have been supportive to the objective of shifting cargo from land to sea. The 2004 EC Communication on short sea shipping provided documentation on where this sector stood since 1999 and what the plans were in this area. Its 2006 counterpart performed a mid-term review of its program to promote SSS. Earlier, the Commission had adopted the proposals by the High-Level group headed by EC Commissioner K. van Miert regarding the revision of the Trans-European Transport Network and the European Parliament approved the Council’s Common Position on the Commission’s Proposal. Of particular interest was the proposed creation of a network of “Motorways of the Sea,” (MoS) with four such maritime arteries identified across Europe. The aim of the MoS, to be fully implemented by 2020, is to concentrate flows of freight on a few sea routes in order to establish new viable, regular and frequent maritime links for the transport of goods between member states and thus reduce road congestion and improve access to peripheral and island countries. In addition, the

1 COM (2004) 453 final, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and The Committee of the Regions, on Short sea Shipping.

2 COM (2006) 380 final, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and The Committee of the Regions, Mid-Term Review of the Programme for the Promotion of Short Sea Shipping.

Commission launched the first *Marco Polo* program,\(^4\) the program that succeeded the previous *PACT* program (Pilot Actions for Combined Transport) to support intermodality. The goal of the first *Marco Polo* program has been to shift some 12 billion ton-kilometres a year from road to non-road modes, which is on the order of 1% of the traffic. *Marco Polo II* (2007-2013) has a much more ambitious goal, to shift some 140 billion ton-kilometres a year off the road, which is on the order of 10% of the traffic\(^5\).

In 2006, Commissioner Borg’s Green Paper on a future maritime policy for the EU\(^6\) had as a strategic objective to develop a thriving maritime economy in a sustainable manner supported by excellence in maritime scientific research, technology and innovation. This proposal aims to enhance the SSS transport sector according to EU objectives for greener (in line with the EU strategy on CO\(_2\) emissions, or international greenhouse gas emissions reduction targets), smarter and safer (fulfil the broad set of common safety standards provided by the European Maritime Safety Agency-EMSA) transport services, increasing of co-modality and decongestion of transport services and encouragement of modal shift. SSS was implicitly at the centre of the Green Paper, although it did not constitute a large section of it.

A Common Maritime Space means that the EU would have a single market in maritime transport, as it already has in road and air transport. The voyage from, say, Hamburg to Piraeus, would become a domestic EU voyage. That would remove the need for customs procedures, cutting through delays, cost, administrative burden and so on. The change into a Common Maritime Space would allow for the free circulation of SSS in Europe in a way similar to that of the truck, thereby facilitating “just in time” logistics planning and reducing cost. If implemented correctly, these would be very much needed changes if one indeed wants to see SSS play the role of checking congestion, noise, pollution and accidents in road transport.

Commissioner Borg’s Green Paper led to the Blue Paper, a full-fledged proposal for an Integrated Maritime Policy for the European Union\(^7\). This integrated, inter-sectoral approach was strongly endorsed by all stakeholders. According to the Commission, applying it will require reinforced cooperation and effective coordination of all sea-related policies at the different decision-making levels. The aim of the Integrated Maritime Policy is to enhance Europe’s capacity to face the challenges of globalization and competitiveness, climate change, degradation of the marine environment, maritime safety and security, and energy security and sustainability. It must be based on excellence in marine research, technology and innovation, and will be anchored in the Lisbon agenda for jobs and growth, and the Gothenburg agenda for sustainability.

In the context of the Blue Paper, the Commission is promoting the creation of a new “European maritime transport space without barriers”. This is a concept which extends the Internal Market wider to intra-EU maritime transport through the elimination or the simplification of administrative procedures in intra-EU maritime transport, in order to enhance its attractiveness and reinforce its efficiency and competitiveness, and contribute to a higher protection of environment. To implement this concept, the Commission has identified a series of measures. Those measures include:

- Elimination of systematic controls and documentary requests by Customs for goods carried by sea between EU ports in line with inland transport. The measure will require a modification of the implementing provision of the Community customs code early in 2009 and should be in force by 2010.
- Rationalization of vessel-related and goods-related reporting and forms required by several Directives and Regulations (formalities for vessels at the arrival/departure of ports, waste and residue

---


\(^7\) COM(2007) 575 final, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and The Committee of the Regions, “An Integrated Maritime Policy for the European Union”
reception, vessel monitoring, maritime security)

- Examining the possibility to grant facilitation to ships sailing between Community ports but making a call in a port located in a third country or a free zone;
- Enhancing the electronic transmission of administrative data through the deployment of e-maritime systems;

There has been a flurry of other legislative action impacting SSS, directly or indirectly. In the mid-term review of the 2001 White paper, the key role of logistics in ensuring sustainability and competitiveness in mobility in Europe, and how logistics contributes to other objectives, such as a cleaner environment, security of energy supply, transport safety and security, is stressed.

In addition, the Commission stated in their Freight Transport Logistics Action Plan launched in October 2007 that “Logistics policy needs to be pursued at all levels of governance”, which is also the reason behind this action plan as one in a series of policy initiatives to improve the efficiency and sustainability of freight transport in Europe. In the Freight Transport Logistics Action Plan a number of short – to medium-term actions is presented that will help Europe address its current and future challenges and ensure a competitive and sustainable freight transport system in Europe. Among the actions are the “Green transport corridors for freight”. The Green Corridors are characterized by a concentration of freight traffic between major hubs and by relatively long distances of transport. Green Corridors should in all ways be environmentally friendly, safe and efficient. Green technologies and smart utilization of ICT, where available, may even improve them. Where not available, new R&D may be needed to further develop what is needed.

Also in October 2007, the Commission issued a Communication on a new ports policy. The purpose of this Communication was to move towards a EU port system able to cope with the future challenges of EU transport needs. It also set an action plan for the European Commission, and followed up from an extensive consultation with the stakeholders in 2006-2007, which included six workshops, two large conferences and meetings with experts from the Member States.

In January 2009 the European Commission updated its strategic goals and recommendations for the EU Maritime Transport Policy until 2018. Maritime Action in the area of maritime transport aims at ensuring the long term performance of the European maritime transport system as a whole to the benefit of all other economic sectors and of the final consumer.

As regards SSS, this Communication recognizes that the challenge is to provide the right mix of measures to ensure that ports can cope efficiently with their gateway function. This would require both providing new infrastructures and improving the use of existing capacities by increasing port productivity. The existing system, including hinterland connections and freight corridors, has to be adapted to cope with the expected growth. In that regard, according to the Commission, the main priorities should be to:

- Establish a true ‘European maritime transport space without barriers’ (see above), removing unnecessary administrative barriers, duplicated cross-border controls, the lack of harmonized documents and all other factors that hamper the potential growth of short-sea shipping.
- Implement the measures announced in the Communication on a ‘European Ports Policy’. In full observance of safety, security and sustainable growth requirements, port services should be provided in all cases in accordance with the principles of fair competition, financial transparency, non-discrimination and cost-efficiency.
- Ensure the right conditions for attracting investment flows to the port sector, prioritising modernization and expansion of port and hinterland connection infrastructure projects in those areas that are more likely to suffer from congestion problems.
- Regarding environmental assessments for port expansion, fast-track procedures that cut the overall lead time significantly should be

11 COM(1009) 8 final, 21.1.2009 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions- Strategic Goals and Recommendations for the EU’s Maritime Transport Policy until 2018.
generalized. To this end the Commission will issue guidelines on the application of relevant Community environmental legislation to port development\(^{12}\).

- Reinforce the EU strategy for ensuring the full deployment of Motorways of the Sea projects, further facilitating the start-up of innovative integrated inter-modal transport solutions, simplifying administrative requirements and supporting the Commission's proposed initiatives in the field of greening transport.

- EU funding programmes such as the Trans-European Network Transport projects, Marco Polo or the Regional Policy instruments should assist in those developments and address modal shift factors.

- Promote measures to facilitate better connection of islands and long-distance intra-EU passenger transport through quality ferry and cruise services, and appropriate terminals. Taking into account the experience gained since the adoption of the Cabotage Regulation as long ago as 1992, the framework for providing public maritime transport services that fully meet territorial continuity requirements could be improved.

- In the above context, examine economic instruments (such as taxes, charges or emission trading schemes) for "getting the prices right"\(^{13}\) encouraging users to make use of short sea shipping alternatives addressing road congestion problems and, in general promoting market solutions that contribute to the sustainability of the transport chain as a whole.

- Address the issue of passenger rights for users of ferry and cruise services in Europe, by promoting a quality campaign (awards for the best ferry operators).

Last but not least, and as this paper was being completed (September 2009), the Commission issued a Communication on an Integrated Maritime Policy for better governance in the Mediterranean\(^{14}\). This Communication calls for an overall stronger co-operation with non-EU Mediterranean partners at the appropriate levels.

The European Commission’s vision for the development of an Integrated Maritime Policy in the Mediterranean includes the following points:

- The permeation of an integrated approach to maritime affairs at the appropriate levels will continue to be encouraged, together with further cooperation and dialogue with non-EU Mediterranean coastal States in this respect.

- Structured and effective dialogue amongst coastal States on governance of the marine space will be stimulated at the appropriate fora.

- Stakeholder platforms will be encouraged to regularly address the Mediterranean Sea and its specificities, and working towards basin-wide stakeholder dialogue, inclusive of stakeholders from non-EU Mediterranean coastal States.

- The necessary efforts need to be employed by Mediterranean Member States in the definition of integrative "Marine Strategies", in line with the obligations arising from the Marine Strategy Framework Directive.

- The potential of engaging in Maritime Spatial Planning in specific sub-regions or sea-areas in the Mediterranean should be fully explored.

- The concretization of Integrated Coastal Zone Management in coastal areas and islands needs to be strengthened, particularly coherence between onshore and offshore planning.

- The development of marine knowledge and integration between marine and maritime research efforts need to be fully pursued, this being at the basis of an ecosystem-based approach to the management of activities at sea.

- The integration of surveillance of maritime activities and operations in the Mediterranean will be furthered, with the objective of making the Mediterranean Sea a safer and secure maritime space.

If one takes at least the above important developments under consideration (and this author claims no encyclopaedic coverage), one may be compelled to deduce that things are going in the right direction for European SSS and intermodal transport. Furthermore, if one compares the European scene with the situation in North America or elsewhere, where similar road congestion problems exist but the approach to solve them using


short sea shipping has still a long way to go (especially in the United States, where the Jones Act and other pieces of legislation that hamper SSS development are in force), then one may get the impression that Europe is far ahead in this area and things are looking promising. But is this really the case?

2. ROAD IS THE KING

It is this author’s opinion that SSS in Europe is not going as well as it should, and that things can be considered as rather unsettling. This opinion is not new, dating several years now. Actually it has been reinforced by recent evidence. In several papers and talks as early as 2004, several concerns on the future of European SSS, of the European port sector, and of related sectors were raised. In a Lloyds List article\(^{15}\), it was argued that the patchwork in EU port policy should be redefined if the port sector were to meet the challenges it faced. In a journal paper\(^{16}\), it was mentioned that “for all the noble intentions as regards short sea shipping, ports and intermodality described in high-profile EU transport policy declarations and documents, much confusion and uncertainty exists as to how, when or if these intentions will ever be reached,” and that “if over-regulated ports are affected adversely by a maze of additional requirements, short sea shipping effectiveness is bound to be affected, and this will help road transport increase its share in intra-community transport even further.” In another paper that year, perhaps provocatively entitled\(^{17}\), the picture of European SSS was described as not very bright, and it was suggested that politicians and legislators should abandon the patchwork modus operandi and adopt a more proactive policy philosophy.

Some 5 years have passed since then. Before the current situation is further discussed, let us look at the facts, focusing on the most recent ones.

Figure 1 is from the most recent (2009) European Commission’s Statistical Pocketbook (“Energy and Transport in Figures”), and shows traffic figures in tonne-km for all freight transport modes in the EU-27. One can clearly see that the gap between road transport (which is the top EU transporter among all modes) and sea transport (the second transporter) is widening, even though the latter has a positive growth. We remind here that road had surpassed SSS as the top transporter in intra-EU trades as early as 1985 (when the EU had just 15 members), a position it has maintained (and further reinforced) through and beyond the enlargement. It is interesting to note that in the interval 1995-2007 SSS volume in tonne-km rose 37% whereas road transport volume increased 49.6%. Note also that the effect of the recent world economic crisis is not seen here, as the data goes to 2007.

Table 1 (next page) is from the same source and shows a continuing positive growth in road’s share among all EU-27 transport modes and a continuing decline of the maritime mode’s share after 2003.

---


So at least up to 2007, these statistics show that the situation regarding the shift of cargo from land to sea has gotten progressively worse over the years.

How can one explain this situation, and (perhaps more important), what can one do to reverse it?

3. DIAGNOSIS-DISCUSSION

It is hard to pinpoint a single issue as solely responsible for the less than desirable growth of SSS vis-a-vis the road mode in Europe. Below we try to identify, in random order, some factors or issues that may have contributed.

3.1 Port package failure

The laudable attempt of the Commission to regulate the market access to port services was not successful, and this certainly did not make things any better for European SSS and intermodality. On January 18, 2006, the European Parliament rejected with a majority of 532 out of 677 the second Proposal of the European Commission for a Directive to regulate market access to port services (the so-called “port package”)

The cause seems clear: At least for the time being, road is better than SSS procedure-wise.

3.3 Environmental issues

Looking at environmental matters, the following EU environmental directives (many being the basis of the “Natura 2000” initiative) come into play: the Bathing Water Directive, the Dangerous Substances Directive, the Wild Birds Directive,

---

20 Bathing Water Directive, 76/160/EEC.
21 Dangerous Substances Directive, 76/464/EEC.
22 Wild Birds Directive, 79/409/EEC.
the Health and Safety in the Workplace Directive\textsuperscript{23}, the Shellfish Directive\textsuperscript{24}, the Urban Waste Water Treatment Directive\textsuperscript{25}, the Habitats Directive\textsuperscript{26}, the Environmental Impact Assessment Directive\textsuperscript{27}, the Waste Reception Facilities Directive\textsuperscript{28}, the Water Framework Directive\textsuperscript{29}, the Strategic Environmental Assessment Directive\textsuperscript{30}, and the Environmental Liability Directive\textsuperscript{31}. All of these directives apply to ports, and as such, impact also intermodal transport and SSS.

In addition, recent developments at the IMO level (International Maritime Organization) may also have important ramifications as regards the maritime mode in Europe, including SSS. At the recent sessions of IMO’s Marine Environment Protection Committee (MEPC), progress as regards air pollution from ships was mixed. On the positive side, the IMO unanimously adopted amendments to the MARPOL Annex VI regulations, stipulating serious reductions in SOx emissions.

On the negative side, progress as regards greenhouse gases (GHG) is very slow, and for various reasons the IMO will not be in a position to have reached a decision by the UN Climate Change Conference (UNFCCC) in Copenhagen in December of 2009, when a new climate agreement is expected to be reached. In the view of some developing countries, any mandatory regime aiming to reduce GHG emissions from ships engaged in international trade should be applicable exclusively to the countries listed in Annex I to the UNFCCC\textsuperscript{32}. The European Commission is following IMO developments very closely, and has stated clearly its intention to act alone if IMO’s procedures take longer than previously anticipated. On the issue of GHG, the Commission clearly expects some action from the next UNFCCC in December 2009, otherwise it is likely to take action by itself.

Worth mentioning here is also that the International Association of Ports and Harbors (IAPH) recently launched a “Resolution on a world wide approach to reduce greenhouse gas emissions in ports”\textsuperscript{33}, recognising measures to reduce the emissions in ports.

Significant as these might be, such developments may also have important impact on other, seemingly unrelated policy subjects regarding other modes of transport, especially road. Already ECSA (the European Community Shipowners’ Association) has voiced concern that the use of fuel with lower sulphur within designated sulphur emissions control areas (SECA) may have a reverse impact on the policy goal to shift cargo from land to sea, by making SSS less favorable to road transport, something that would ultimately lead to more CO\textsubscript{2} pollution overall\textsuperscript{34}. Clearly it would not make sense to reduce pollution at sea, only to see the savings being more than offset by a pollution increase inland. Measures to reduce emissions in ports (such as cold ironing, and others) may, if not implemented properly, increase the cost of moving freight through ports and again discourage or even reverse modal shifts from land to sea. The question is, how can the environmental issue be handled so that all these policies converge in a ‘win-win’ fashion?

Thus, and even though the above environmental policy framework is certainly impressive, one may wonder if all these regulations together wouldn’t place a rather heavy burden on the entire European intermodal transport system, just to comply with all of them. The case of scrapping plans to build a large container terminal at Dibden Bay in the UK on environmental grounds\textsuperscript{35} and after a public inquiry that lasted a year and had 15,000 pages of documentation, highlights the fact that times are indeed different. But if ports suffer a burden, the same is true for whatever SSS traffic goes through them, and if in fact that traffic chooses to do so. At the same time, the continuing difficulty in internalizing the external costs of road transport makes the playing field non-level for SSS as regards environmental matters.

\textsuperscript{23} Safety and Health of Workers at Work Directive 89/391/EEC.
\textsuperscript{24} Shellfish Hygiene Directive, 91/492/EEC.
\textsuperscript{25} Waste Water Treatment Directive, 91/271/EEC.
\textsuperscript{26} Habitats Directive, 92/43/EEC.
\textsuperscript{28} Waste Reception Facilities Directive, 2000/59/EC.
\textsuperscript{29} Water Framework Directive, 2000/60/EC.
\textsuperscript{30} Strategic Environment Assessment Directive, 2001/42/EC.
\textsuperscript{32} And indeed, no final decision was reached on any of these issues at the latest MEPC 59 (13-17, July 2009), highlighting the difficulty of reaching a consensus on these matters.
\textsuperscript{33} International Association of Ports and Harbors (IAPH): “Resolution on a world wide approach to reduce greenhouse gas emissions in ports” adopted on 16 April 2008, in Dunkirk, France
\textsuperscript{34} “IMO sulphur limits deal could see more freight hit the road”, Lloyds List, 10.4.2008
\textsuperscript{35} Lloyds List, 21/04/2004.
3.4 Security issues

Turning now to security matters, it is known that ships and ports had to comply with IMO’s ISPS code by July 1, 2004. And whereas ships more or less found a way to comply with that goal, the situation with ports was far more difficult. Perhaps adding to the difficulty, the EU has also adopted a Regulation on ship and port security, which transposes the ISPS code into EU law. Parts of this Regulation are more stringent than the ISPS Code, by making mandatory some parts of the Code that are not mandatory. In addition to this Regulation, there is also a specific Directive on port security, and also a proposal for a Regulation on supply chain security. On top of all this, one also needs to add the various bilateral and global US-EU agreements on ship and port security, for instance under the “Container Security Initiative” and other programs. And it is worthy to mention that under the “International Port Security Program” of the US Coast Guard, all major ports, including EU ports, will be under intense American scrutiny as regards security.

There is no question that the goal of adequate security should be pursued at all levels. However, delays in ports due to security regulations are another obstacle against SSS and in favor of road transport. A cargo load from Bilbao to Hannover will not stop anywhere along its route if it travels by truck, but will be subject to security checks if its route involves a sea leg. The stipulation of the United States that all containers destined to the US will have to be screened will certainly add to the bottlenecks in European ports and will thus impact European SSS, even though it is not directly connected to intra-European freight.

3.5 Other open policy issues

The anticipated creation of a Common Maritime Space has opened a whole range of inter-related subjects that need analysis. The EU will have its own single “national” waters along the EU coasts and around its islands. This will change the way “innocent passage” will be applied by transiting foreign flag vessels and will simultaneously raise the question which flags will be allowed to trade in that space and under what conditions. Will these be all flags, as done today when most coastal Intra-Community (and therefore short sea) shipping is “international”, or will it be only EU flag ships? These are open matters which have to be thought out early on (thus far they have not).

The Green Paper also talks about reviving European Maritime Heritage. To the extent (and this is unclear) that this means employing EU seafarers onboard EU flagged ships there are some important aspects to be discussed such as the sufficiency of EU seamen, the competitiveness of SSS ships running with – partly or wholly EU crews – and the uniformity of salaries and employment conditions for seamen across the EU. Under what conditions EU flag vessels can compete with non-EU ships when the former are employing more expensive crews? How compliant is this aspect with the dicta of the Lisbon convention? Will Europe be pushed to adopt legislation imitating the US on that matter (i.e. the Jones Act)? It is evident that the interests of deep sea operators are different from the interests of the short sea operators. ECSA has voiced its objection to the Common Maritime Space. The European Shortsea Network has voiced its support. Single shipowners unions will have to seek compromises among their members. It is reasonable to expect road transport companies not to like the Common Maritime Space in fear that this would take away business from the roads. In their concerns they will have strong support from road transport equipment manufacturers, known for their tough lobbying practices.

3.6 SSS fleet non-renewal

As finally regards a technological aspect of the problem that seems mundane, the European Short Sea fleet is in a dismal state, as documented in various studies and papers. This fleet has an

36 International Ship and Port Security code, an amendment to the SOLAS Convention, adopted in the IMO diplomatic conference on 12 December 2002.


41 See Security and Accountability For Every Port Act (SAFE Port Act) of 2006, signed into law by President George W. Bush in October 2006.

42 See for instance, Wijnolst, N., and F. Waals, European Short Sea Fleet Renewal: Opportunities for shipowners and shipyards. SNAME Greek Section 1st International Symposium on Ship Operations, Management and Economics, Athens,
average age in excess of thirty years, despite hasty recent orders of double skin tankers. With much of the fleet requiring renewal, the question who will be the transporter of goods to be shifted from land to sea, assuming the shift will happen, remains wide open. It is inevitable that sooner or later there will be a pollution incident involving an old SSS vessel and then the public will start pointing the finger to the lack of any serious attempt to replace old tonnage. The EU shipbuilding industry has all but disappeared at times when Far Eastern competitors are openly supporting their own through shipbuilding subsidies. Profit margins of short sea operators have been slim, the banks have been unwilling to extend credit to them and the construction of ships in the EU has been expensive. Under the circumstances, what has been achieved so far in terms of SSS growth in Europe is nothing short of a miracle. However, miracles do not last forever. The fleet is old and there are very few shipyards left. The urgent replacement of the EU fleet will soon call for new ideas and fast implementation.

4. CONCLUSIONS

This paper has attempted to highlight some of the challenges faced by the European Short Sea Shipping sector, and present where it stands today, in the context of recent policy initiatives. Recent evidence on traffic trends reaffirms this author’s opinion that the situation in European SSS continues to be not very bright, in spite of its continuing growth over the years. For all the impressive regulatory-legislative initiatives, declarations and other noble intents that have been presented and advanced over the years, road transport continues to be the undisputed King of intra-European transport, and it seems that it will not lose that position any time soon (if anything, this position seems to be getting stronger as time goes by). If the European society is satisfied with this situation, then there is not much that can or should be done. However, and to the extent this state of affairs is not desirable, for environmental or other reasons, then it is clear that much more should be done to reverse the situation.

What should be done? This is an easy question to a difficult problem. From the rudimentary diagnosis offered in this paper, the following can be identified: (a) the proliferation of policies on a fragmented basis does not necessarily contribute to the holistic assessment that is necessary for the rational treatment of a multi-faceted problem, (b) non-action as regards the full internalization of the external costs of road transport, while at the same time the maritime mode is handed the full load of environmental and security specifications does not create a level-playing field and does not promote competition, (c) politicians and legislators should not put the cart before the horse but rather produce policy after a careful assessment of all of its implications, and (d) special interests mainly from the automotive and trucking industries should be put aside in the quest to develop a sensible policy as regards transport environmental matters.

Greece, May 2005. According to that study, 55 percent of the fleet is older than 20 years, 38 percent is older than 25 years, 21 percent older than 30 years and 10 percent of the ships is older than 35 years.