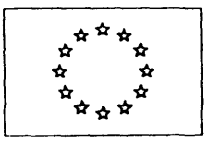


COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 05.07.1995
COM(95) 317 final

# Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions

# The Development of Short Sea Shipping in Europe:

## *Prospects and Challenges*

## I. Introduction

In its White Paper on "The Future Development of the Common Transport Policy" of December 1992[1], the Commission outlined future priorities based on the need to reconcile the demand for mobility with the requirements of the environment, in line with the principle of "sustainable mobility".

This Communication examines the potential contribution of short sea shipping to the achievement of sustainable mobility. It includes a series of recommendations addressed to Member States, their regional and local authorities as well as the maritime industries themselves. It also includes ideas for actions which can most appropriately be undertaken at Union level. It is intended to seek the political support of the Council for these recommendations.

For the purposes of this Communication, short sea shipping is understood to cover maritime transport services which do not involve an ocean crossing. It includes maritime transport along the coast and between the mainland coasts and islands of the European Union. It covers purely national transport (cabotage) and cross border services, as well as sea-river transport by coastal vessels to and from ports in the hinterland. The notion of short sea shipping also extends to maritime transport between the Member States of the Union and Norway and Iceland, other States in the Baltic Sea, the Black Sea and the Mediterranean areas. This definition will be reviewed following the debate on this Communication which will take place.

At first glance, the main emphasis of this Communication appears primarily to be on promoting the shift, where appropriate, of transport of goods from road to sea. The achievement of sustainable mobility necessarily targets, in the first place, the transport of goods. Nevertheless, the measures proposed are designed to cover both goods and passengers. It is certain that the implementation of some or all of the measures put forward for transport of goods in the action programme will have an accompanying positive effect on the quality and efficiency of seaborne passenger services.

---

1 COM (92) 494 final, 2 December 1992.

Short sea shipping has the potential to contribute to easing congestion faced at present in land transport. Increasing demand for transport services in recent years has created serious traffic congestion on land routes in regions at the heart of the Union. The Community's transport system is subject to imbalances and inefficiencies. One of the main reasons for these imbalances and inefficiencies is that transport users have not been adequately charged the full costs of the transport services they use. The balance between transport demand and supply has therefore been distorted, both between and within modes. As in particular road traffic costs do not reflect the full social and environmental cost of transport, demand has been artificially high. This has led to a clear distortion of the competitive position of more environmentally friendly modes of transport such as short sea shipping. The more general question of the internalisation of the external costs of transport will be the subject of a Commission Green Paper to be published next year.

The Communication is not a legal instrument and does not accompany a legal instrument. It is a political document outlining general policy guidelines. In presenting this Communication before the submission of specific legislative proposals for the promotion of short sea shipping, the Commission wishes to stimulate a general political and public debate on the various ideas raised in this Communication. The Commission has already announced its intention to launch this debate in its Work Programme for 1995. The outcome of the political debate as well as the results of the consultation with the industry will be of use to the Commission in the preparation, where appropriate, of proposals.

The Maritime Industries Forum (MIF)[2], established by the Commission in 1992, sees the development of short sea shipping as a high priority and has consistently emphasized the role this mode of transport could play within the Community transport system.

## II. The potential for short sea shipping

The demand for transport services is likely to increase further in the future as a consequence of economic growth in general. The creation of the internal market will also result in more trade between Member States. The recent accession of Austria, Finland and Sweden to the Union will enhance this trend.

---

[2] The Maritime Industries Forum, set up in 1992, examines the problems faced by the maritime industries and makes recommendations to the Member States, the Commission and to the industry itself. The Forum brings together representatives of industry, trade unions, research institutes, governments and EC institutions.

Short sea shipping has certain advantages compared to land transport. Europe is a large peninsula penetrated by inland seas, important rivers and canals. It has a favourable geographical configuration which makes it particularly well suited for waterborne transport. In terms of infrastructural requirements and energy and environmental performance, short sea shipping compares well with other modes of transport. It can contribute to the economic development of the islands and peripheral regions of the Union through cost-effective transport services. It also has a relatively good safety record. Already prior to the accession of Sweden and Finland to the Union approximately 30% of all goods transported between Member States of the Union were carried by short sea transport. It can also contribute significantly to the development of European shipbuilding as roughly 50% of the vessels constructed in European Union shipyards are vessel types mainly used in short sea shipping.

A study, co-financed by the Commission, examined the competitive position of short sea shipping on eight important trade corridors in the Union, three of which went beyond its external borders. The survey shows that there are growth opportunities for short sea shipping in at least six of the eight corridors analyzed, including in particular Spain/Portugal to Germany, Spain/Portugal to The United Kingdom, Benelux/Germany to the Nordic countries and Benelux to the Northern region of The United Kingdom. It estimated, for example, that short sea shipping could, on the Spain/Portugal to Germany corridor, capture from road transport another 20% of the total traffic volume in the short and medium term and a further 13% in the long term. This study is discussed in detail in Annex 2.

Despite its advantages Short Sea Shipping faces a number of obstacles which discourage its use. There are a number of problems in some ports which create delays. They include the lack of infrastructure and connecting links to the hinterland, cumbersome documentary and procedural requirements and restrictive labour practices and labour disputes. Port charges are quite high in some ports, particularly in southern Europe. Short sea shipping is also insufficiently integrated with other modes in the transport chain and can have difficulty in meeting "just-in-time" requirements. Transit times tend to be longer than those of other modes. It also suffers from a somewhat old-fashioned image as shippers are often not aware of the full range of services available.

Sustainable mobility requires multimodal transport networks in which the advantages of the individual modes are combined in a way which increases efficiency, reduces pressure on the environment and makes best use of existing resources. Short sea shipping is not yet contributing to these objectives.

This communication, which has the intention of bringing short sea shipping to an equal footing with the other modes of transport, focuses on three areas to be addressed:

**A. Improving the quality and efficiency of short sea shipping services.**
**B. Improving port infrastructure and port efficiency**
**C. Preparing short sea shipping for a wider Europe**

## A. Improving the quality and efficiency of short sea shipping services.

The first area, concerning the improvement of the quality and efficiency of short sea shipping services, concentrates on the role of the Community's 4th Framework Programme in Research and Development and its impact on short sea shipping. The specific transport programme, will contribute to the development of new shipping technologies and strengthen the competitiveness of the European maritime industries. It will focus, inter alia, on fast waterborne transport systems and technology such as fast-cargo ships, self-unloading bulk carriers, automated unit-load ships and sea-river vessels. Research activities in these fields should help to integrate short sea shipping better into multimodal transport chains. Other areas of the waterborne transport work programme, particularly the ports and logistics sections, will also have a major impact on the future development of short sea shipping.

Other specific programmes (e.g. those concerning Marine science and Technology, Environment and Climate, and Material and Industrial Technologies), as well as the remote sensing activities of the Joint Research Centre, are also relevant in this context as they cover areas such as the state of the sea and water level surveying and prediction, the development of instrumentation and materials, coastal engineering etc.

Another focus in this context involves the full implementation in short sea shipping of Electronic Data Interchange (EDI) in order to overcome the cumbersome traditional documentation systems which inhibit efficient cooperation, increase the possibility of error and raise administrative costs. EDI will enhance the smooth flow of cargo, promote the efficiency, safety and reliability of short sea shipping and furthermore improve its links with other modes of transport.

## B. Improving port infrastructure and port efficiency

Actions to improve the short sea transport product must be combined with actions to improve port efficiency in order to substantially increase the competitiveness of short sea shipping. Ports provide the essential link between maritime, land and inland waterway transport. Only if ports perform efficiently as an integrated part of the transport chain, can the full benefits of short sea shipping be achieved.

The ports are an integral part of the trans-European transport network plan. Community guidelines for the development of this plan have been put forward by the Commission and are at an advanced stage in the decision-making procedure. The Commission's proposal does not provide for a defined network of ports of Community interest. Member States rightly feel that network-related action may discriminate against ports which are not part of the network. Further, maritime transport is not confined to rigid lines of infrastructure. Instead, the proposal focuses on port and port-related infrastructure projects of common interest. It does not seek to limit the ports in which these projects may arise to those tied directly to the land elements of the network. In principle, these projects can arise in a much wider range of ports in the Community, both sea ports and sea-river ports.

Under the above mentioned proposal, port projects of common interest must conform to a set of general principles appropriate to all modes and a set of special conditions specific to ports. Community support under the trans-European network budget line will be available for projects of common interest financed by the Member States and identified in the context of the Community guidelines.

Transparency in port tariffs is of direct concern to port users, who have a clear interest in knowing the basis on which charges for services have been calculated so that they may make an informed choice between those on offer.

In order to ensure respect of the Treaty rules on State aid, the Commission is starting an inventory of all transport State aid granted by Member States to ports as well as action to improve the transparency of the financial accounts of entities responsible for providing transport infrastructure and services. It envisages the establishment of guidelines on how to apply the State aid provisions of the Treaty to the port sector.

Furthermore, the application of Article 85 of the Treaty, which prohibits restrictive agreements between undertakings, and of Article 86, which prohibits abuse of dominant positions, together with the regulation of State monopolies pursuant to Article 90 of the Treaty is of overall importance in improving efficiency and customer-oriented services. Full application of competition law will thus help reduce inefficient port operations which cause delays, exaggerated prices for port-users, and certain employment-related problems, as in the case of the provision of monopoly services.

Finally, major efficiency improvements in ports could be achieved by a relatively simple step on working hours. The absence of essential port services during evening, weekend and mid-day hours in many ports has been identified as an important source of delay. Introducing 24 hour services, especially for health and customs checks, in ports where there is sufficient demand, could remedy delay problems considerably.

In the context of improving both the quality and efficiency of short sea shipping services and port infrastructure and port efficiency, the Commission supports the setting up of informal discussion structures, such as round tables. An enhanced dialogue between port bodies (such as port and customs authorities), port service providers (such as stevedores and terminal operators), and port users (ship owners, agents, shippers, freight forwarders) is particularly important in finding pragmatic solutions to port problems. The round tables should be set up in the first instance at local port level. Besides this local approach, national round tables, involving the central administrations, should be set up to address problems which can not be solved at local level. In some European countries, such round tables have already produced encouraging results.

### C. Preparing Short Sea Shipping for a wider Europe

The implementation of a series of agreements between the EU and a number of Central and Eastern European States, including States in the Baltic, will accelerate trade relations and, accordingly, further increase the demand for efficient transportation services. The maritime location of most of these countries with important ports on the Baltic and the Black Sea means that short sea shipping is well-placed for contributing more than proportionately to the provision of such services. Closer economic ties with neighbouring countries in the Mediterranean region will also strengthen the relative importance and potential of short sea shipping.

Shipping, and more specifically short sea shipping, must prepare for a wider Europe. The Commission should stress, where appropriate, the need to promote short sea shipping when Central and Eastern European or other States (e.g. Mediterranean or Black Sea countries) request Union support for projects or studies related to transport infrastructure. It is important that maritime transport and ports infrastructure is fully taken into account at a time when fundamental decisions affecting the future transport policies of these countries are being made.

In this context, the Commission services have already set up Working Groups for the Development of Waterborne Transport in the Baltic, the Mediterranean and the Black sea areas. Each of these Working Groups will set up a multi annual work programme aiming at inter alia developing the potential of shortsea shipping in their regions. This will allow the Community and other donors to make financial and other assistance available for the promotion of Short Sea Shipping.

## III. Conclusion

This Communication has aimed at giving an outline of the potential of short sea shipping for Europe. It has shown that there are still many hurdles to overcome, if short sea shipping is to play its full part in the multimodal transport system.

Improving short sea transport services must involve action in the administrative, technical and commercial fields. It also implies close cooperation between industry, users and administrations. The solutions need to focus not only on shipping, but also on ports and the general political and regulatory framework of shipping. Actions must be co-ordinated. The modal shift which should result from removing the obstacles for short sea shipping will ease land traffic congestion and improve the environmental situation. This should contribute to reducing the level of investment necessary for land transport infrastructure. Both transport users and transport providers should ultimately gain from a more efficient multimodal network in which short sea shipping attains its full potential.

The Commission has set out an action programme which includes subjects for Community action as well as recommendations directed to other parties active in this field. Implementation of this programme will be carried out in close cooperation with national and local authorities as well as the maritime sector itself.

In presenting this Communication on the promotion of short sea shipping, the Commission wishes to stimulate a general political and public debate on the various ideas raised. Following this debate, the Commission will, where necessary, submit legislative proposals.

## IV. Action programme

In section A below are listed all measures which will be undertaken by the Community. Section B provides an overview of all measures which need to be taken and indicates the parties which should be responsible for the actions.

### A. Commission action programme

#### *a. Improving the quality and efficiency of short sea shipping services*

- Promotion of short sea shipping will be one of the main research priorities in the context of the specific programme on transport as well as the specific programme on telematics applications of the 4th Framework Programme on research and development *(beginning in 1995).*

- Launching of a large-scale demonstration project for short sea shipping *(1997)* integrating the results obtained under EURET, APAS and the 4th Framework Programme in its different areas. The structure and terms of reference of this project will be defined on the basis of the results of a R&D concerted action on short sea shipping *(1995).*

- Support for short sea shipping pilot schemes in the context of integrated intermodal transport chains *(ongoing).*

- Integration of short sea shipping into a multimodal transport information system supporting the cooperative management of the transport flow *(beginning in 1996).*

- Implementation and monitoring of the MARIS (Maritime Information Society) project *(ongoing).*

- Sea-river port projects of common interest to be considered for support under the trans-European network plan on the same basis as sea ports *(ongoing).*

- Promotion of Electronic Data Interchange:

  - Support financially, where appropriate, initiatives aimed at promoting EDI within the maritime industries *(1995 and ongoing).*

  - Support for the creation of a group of industry experts composed of industry experts in EDI who would provide services to small ports and small and medium-sized shipping companies *(1995).*

  - Support for initiatives which will make data on present short sea services available to all interested parties through EDI systems *(1995 and ongoing).*

- Support for conferences, workshops and other actions aimed at marketing and promoting short sea shipping *services (ongoing).*

- Participation in a programme of training courses on short sea shipping which is being carried out in the framework of UNCTAD's European TRAINMAR centres *(ongoing).*

- Proposing the establishment of a definitive veterinary check regime which will restrict checks as far as possible to the port of final destination *(1995).*

- Proposal for a Council Directive on the provision of statistical data on transport by sea *(proposal adopted by the Commission in 1994).*

***b. Improving port infrastructure and port efficiency.***

- Including in the trans-European network plan port projects of common interest of particular interest for short sea shipping *(1995).*

- Presentation of Commission guidelines on State aids to ports *(1996).*

- Research and Development in ports will be an important part of the waterborne transport programme in the context of the 4th Framework Programme on R&D *(1995).*

- Support for setting up local port or national roundtables of the maritime industries to address problems arising in the ports and to promote short sea shipping services *(1995 and ongoing).*

- Support for initiatives taken by industry round tables to improve port efficiency and to promote short sea shipping as such *(1995 and ongoing).*

- Provision of financial support for visits, as well as secondments, by industry experts to ports, especially in Southern Europe *(ongoing)*.

- Provision of financial support for training programmes for managers of ports in peripheral areas organised in highly developed ports in other parts of the Union *(1995 and ongoing)*.

***c. Preparing short sea shipping for a wider Europe.***

- Emphasis on, in relations with certain third countries (especially the Baltic Sea, Black Sea and non-EU Mediterranean countries), the need to promote short sea shipping, including maritime links with the European Union *(ongoing)*.

- Favouring, where appropriate and requested, projects linked to the development of short sea shipping in technical assistance programmes to the Central and Eastern European Countries and the Newly Independent States *(ongoing)*.

- Participation in Working Parties on waterborne transport in the Black Sea, the Baltic Sea and the Mediterranean Sea areas which will pursue work programmes aimed at, inter alia, developing the potential of short sea shipping in those areas *(1995 to 1998)*.

- Implementing the MARIS project as a mechanism which can contribute to the preparation of short sea shipping for a wider Europe *(ongoing)*.

## B. General action programme -- summary chart

| Action/Recommendation | Responsibility for Action | | | | |
|---|---|---|---|---|---|
| | Commission | Member States | Local/ Regional Authorities | Port Authorities | Maritime Industries |
| I. **Improving the quality and efficiency of short sea shipping services** | | | | | |
| - *Promotion of short sea shipping to be one of the priorities* within the specific transport programme of the Community's Fourth Framework Programme on R & D. | X | X | | | X |
| - Support for the establishment of open multimodal transport information systems and telematics services for cooperatiive management, considering the special need of the short sea *shippinglines and the small and medium sized ports.* | X | X | X | X | X |
| - Support for short sea shipping pilot schemes in the context of integrated intermodal transport chains . | X | X | X | | X |
| - Implementation and monitoring of the MARIS ( Maritime Information Society) project | X | X | X | | X |
| - Promotion of Electronic Data Interchange: | | | | | |
| - Further development of EDI in areas such as customs procedures and veterinary checks. | X | X | | | |
| - Support financially, where appropriate, workshops, conferences and other initiatives aimed at promoting EDI in the maritime industries | X | X | | | |
| - Support for the creation of a task-force composed of industry experts in EDI who would provide services to small ports and small and medium-sized shipping companies | X | | | | X |
| - Support for initiatives which will make data on present short sea services available to all interested parties, possibly through EDI systems | X | X | | | |

| Action/Recommendation | Responsibility for Action | | | | |
|---|---|---|---|---|---|
| | Commission | Member States | Local/ Regional Authorities | Port Authorities | Maritime Industries |
| - Participation in a programme of training courses on short sea shipping which is being carried out in the framework of UNCTAD's European TRAINMAR centres | X | | | | |
| - Support for conferences and workshops aimed at promoting short sea shipping | X | X | | | |
| - Regular updated information on services, lines and agents, types of cargo and ports of call to be made more widely available by ports and shipping companies | | X | | X | X |
| - Proposal for a Council Directive on the provision of statistical data on transport by sea . | X | X | | | |
| - The establishment of a definitive veterinary checking regime in order to restrict checks as far as possible to the port of final destination. | X | X | | | |
| II. **Improving port infrastructure and port efficiency.** | | | | | |
| - Including in the trans-European network plan port projects of common interest of particular interest for short sea shipping as well as relating to sea-river ports . | X | X | X | X | |
| - Setting up of roundtables of the maritime industries to address problems arising in the ports and to promote short sea shipping services. | X | X | X | X | X |
| - Support for initiatives taken by industry round tables to improve port efficiency and to promote short sea shipping as such . | X | X | X | | X |
| - Provision of financial support for visits, as well as secondments, by industry experts to ports, especially in Southern Europe . | X | X | | | X |
| - Provision of financial support for training programmes for managers of ports in peripheral areas organised in highly developed ports in other parts of the Union. | X | X | | | X |
| - Presentation of Commission guidelines on State aids to ports. | X | | | | |

| Action/Recommendation | Responsibility for Action | | | | |
|---|---|---|---|---|---|
| | Commission | Member States | Local/ Regional Authorities | Port Authorities | Maritime Industries |
| - Financial relations between ports and public authorities to become more transparent. | X | X | X | X | |
| - Pilotage charging systems for short sea vessels to be reviewed. | | X | X | X | X |
| - Port charges to be transparent and relate to services actually required and rendered. | | X | X | X | |
| - Restrictive practices in ports to be abolished. | | X | X | X | |
| - Ports to set their tariffs, when based on the new GT system, in such a way that no undue profits are made at the expense of short sea shipping. | | X | X | X | |
| III. **Preparing short sea shipping for a wider Europe** | | | | | |
| - Emphasis on, in relations with certain third countries (especially the Baltic Sea, Black Sea and non-EU Mediterranean countries), the need to promote short sea shipping, including maritime links with the European Union | X | X | | | |
| - Favouring, where appropriate and requested, projects linked to the development of short sea shipping in technical assistance programmes to the Central and Eastern European Countries and the Newly Independent States | X | X | | | |
| - Participation in Working Parties on waterborne transport in the Black Sea, the Baltic Sea and the Mediterranean Sea areas area which will pursue work programmes aimed at, inter alia, developing the potential of short sea shipping in the area | X | | | | X |

D-F

# The Development of Short Sea Shipping in Europe:

## *Prospects and Challenges*

**ANNEXES**

## ANNEX 1: THE ADVANTAGES OF SHORT SEA SHIPPING

### 1. Geographical Advantage

The European Union has a favourable geographical configuration which makes it particularly well suited for waterborne transport. The European Union coastline, including the new Member States, is more than 67.000 km long. Few industrial and economic centres are situated more than 400 km from a port. Roughly 60 to 70% of all European industrial centres are located between 150 to 200 km from the coast and are therefore, in principle, conveniently located in terms of access to waterborne transport.

Purpose-built coastal vessels can penetrate the wide European network of rivers and canals. Europe benefits from a widely dispersed network of 25.000 km of inland waterways, of which 12.000 km have been included in the trans-European transport network. Canal and river barges transport more than 430 million tonnes a year in the European Union. Vessels can load and unload at inland ports such as those of Duisburg, Mannheim, Strasbourg as well as Paris, Lyon, Liège, Ghent and Brussels. This allows direct waterborne connections with sea and river ports in other European Union countries, in Scandinavian countries and in Central and Eastern Europe.

Maritime transport, apart from signalling and safety systems, requires infrastructure only in the ports. It therefore requires less infrastructure investment and scarce space than land modes.

### 2. Energy and Environmental Performance

Short sea shipping is generally more energy efficient than road and rail transport. For example, according to research undertaken by the United Kingdom Department of Transport[1], the energy consumption of road freight transport falls in the range of between 0.7 and 1.2 mega-joules/tonne-km. For rail the figure is in the region of 0.6 mega-joules/tonne-km. In comparison, the energy consumption of a 3000 dwt coastal tanker at 10 knots is 0.25 mega-joules/tonne-km. The figure for a medium sized container ship is approximately 0.12 mega-joules/tonne-km.

---

[1] *Quoted in* Cheetham, C., Hornby, P. and Papenhuijzen, R.. "Recent Developments in Feeder Transport by Coasters", in European Shortsea Shipping, proceedings of the First European Research Roundtable Conference on Shortsea Shipping, Lloyd's of London Press Ltd.

Equally important for the success of short sea shipping are its environment and safety advantages. Maritime transport is by far the most environmentally-friendly mode of transport in terms of levels of pollution and noise. For example, as far as air pollution is concerned, it has been estimated that total emissions of $CO_2$ (grammes per tonne-km) are 30 for waterborne transport, 41 for rail and 207 for road[2]. *(For a more detailed comparison between modes in terms of both air pollution and energy consumption see table below)*. Comparable data as regards emissions of $SO_2$ are not available, but work done for the Commission has indicated that waterborne transport accounted in 1993 for 32% of total $SO_2$ emissions fom the transport sector and 2% of total emissions.

***Table 1.*** **Different modes of freight transport in terms of energy use and pollution**

| Specific Primary Energy Consumption (KJ/Tonne-km) | | | | |
|---|---|---|---|---|
| Rail | Water Transport | Road | Pipeline | Air |
| 677 | 423 | 2,890 | 168 | 15,839 |

| Specific Total Emissions (g/Tonne-km) | | | | | |
|---|---|---|---|---|---|
| | Rail | Water Transport | Road | Pipeline | Air |
| $CO_2$ | 41 | 30 | 207 | 10 | 1,206 |
| $CH_4$ | 0.06 | 0.04 | 0.3 | 0.02 | 2.0 |
| VOC[1] | 0.08 | 0.1 | 1.1 | 0.02 | 3.0 |
| $NO_X$ | 0.2 | 0.4 | 3.6 | 0.02 | 5.5 |
| CO | 0.05 | 0.12 | 2.4 | 0.00 | 1.4 |

1) VOC = Volatile Organic Compounds

*Source: Whitelegg, John, "Transport for a Sustainable Future -The case for Europe", 1993.*

---

[2] Whitelegg, John. "Transport for a Sustainable Future; The Case for Europe", 1993.

## 3. Positive Effect on the Development of Other Sectors

Short sea shipping also plays an important role in a broader political and economic context.

In case of islands and peripheral regions of the Union, short sea shipping is by far the most important and, in many instances the only, mode of transport both for passengers and goods. Thus, it can contribute to the development of islands and the peripheral regions of the Union by economically stimulating these regions.

Short sea shipping also contributes significantly to the development of European shipbuilding. In 1992, 17% of all merchant vessels of 6.000 GRT or less built worldwide were constructed in European Union shipyards, i.e. 96 out of 560. 52% of all vessels built in European Union shipyards are 6.000 GRT or less, i.e. 96 out of 185.

***Table 2.*** **Building of merchant vessels of 6.000 GRT* or less (origin) as compared to all vessels (excluding passenger ships). Building year: 1992.**

| | Vessels of 6.000 GRT or less. | All vessels. |
|---|---|---|
| **WORLD** | 560 | 984 |
| **EUROPE** | 161 | 302 |
| **EUROPEAN UNION** | 96 | 185 |

*Source: Institute of Shipping Economics and Logistics (ISL) based upon data from Lloyd's Fleet Data Bank, January 1994.*

* The figure of 6.000 GRT is often used as a dividing line between deep sea ships and short sea ships.

## 4. Room for Expansion

While there is increasing congestion in road transport, short sea shipping still has available capacity. Extra cargo could be accommodated by the existing short sea fleet without high investment in additional vessels.

Infrastructural costs associated with capacity expansion are relatively low and would relate mainly to port projects. Those projects can often be identified, prepared and implemented in less time than is generally the case for major projects related to other modes of transport. Comparatively small port projects, both in terms of scale and costs, can often have a disproportionately large impact on transport development. Relatively inexpensive projects such as the removal of sandbars or the construction of safety breakwaters can make ports much more accessible for maritime transport. A growth in short sea transport would not require in most parts of the European Union (Southern European ports, in general, being an exception) expensive additional infrastructural works in the ports. Investments in capacity increase in short sea shipping are, therefore, in general more cost effective than in land modes.

## ANNEX 2: GROWTH POTENTIAL OF SHORT SEA SHIPPING.

### A. Examples of growth

As a consequence of the military conflict in ex-Yugoslavia, traffic carried by land transport to and from Greece has been diverted onto other routes which are longer and more expensive than the traditional ones as well as to maritime routes.[3] There has therefore been also an increased use of the short sea crossing to and from Italy for transport of cargo. There is a particular need for Greece to develop stronger and more efficient maritime connections as an alternative to long and difficult overland routes. Table 1 shows that maritime transport from Greece to Italy, in terms of lorries/trucks carried, has increased dramatically since 1991.

**Table 3. Lorries/trucks transported by sea from Greece to Italy (1991/1994)**

| From: Greece | To: Italy | | | | Annual Total | |
|---|---|---|---|---|---|---|
| | Ancona | Bari | Brindisi | Trieste | | 1991 = 100 |
| 1991 | 20522 | 11511 | 14650 | - | 46683 | 100 |
| 1992 | 25604 | 16982 | 17613 | 1263 | 61462 | 132 |
| 1993 | 32913 | 24366 | 36254 | 2519 | 96052 | 206 |

*Source: Athens University of Economics and Business.*

This emphasises the need to assess the functioning of the Adriatic ports and to decide upon the measures necessary to upgrade them in order to foster short sea services as an alternative to land transport in North-South trade in the Balkan area.

---

[3] In 1990, 90% of Greece's exports to its EC partners went by the land route linking this country to the central areas of the Community. Since the beginning of the military conflict in 1991 traffic switched to alternative routes:

- by road, further East, via Bulgaria, Rumania, Hungary and even the Czech and Slovak Republics;
- by sea, via Italy, between Brindisi, Bari or Ancona and Patras or Igoumenitsa, whose ports are equipped to accommodate Ro/Ro traffic.

## B. The "Corridors Study"

### 1. Introduction

A large-scale study, co-financed by the Commission, has examined the competitive position of short sea shipping. Eight important trade corridors in the Union, of which three went beyond its external borders, were selected for analysis.[4] The goal of the study was to identify for each of these eight corridors the types and quantities of goods that could be transferred from land modes to short sea shipping. The study was also to identify the main obstacles preventing such a transfer. The potential of sea-river traffic was examined though not in detail on specific routes.

The following general conclusions can be drawn from the study:

- Trade can be shifted from land modes to short sea shipping. However, this will only be possible if short sea shipping improves the efficiency of its operations and is integrated into multimodal transport chains.
- The cargo transfer potential is sufficient to justify substantial new investment in short sea shipping within the next few years.
- The cargo transfer potential is such that if realized in practice it could reduce substantially the growth of land traffic on congested corridors.
- The use of inland waterways ports by short sea vessels could provide efficient new transport services between certain major European industrial centres.

### 2. Growth Potential in Specific Corridors

The study's findings, based on the available statistical information, were made with respect to the following eight corridors:

- Spain - United Kingdom
- Portugal - United Kingdom
- Spain/Portugal - Germany
- Italy/Greece - United Kingdom/Ireland
- Italy - Danubian Countries
- Benelux/Germany - Nordic Countries
- Benelux/Germany - United Kingdom/Ireland
- Benelux/Germany - Black Sea Area

---

[4] The study consisted of the following two reports:
"Analysis of the Competitive Position of short sea shipping: Development of Policy Measures". Policy Research Corporation N.V., August 1993; and
"Transport de Marchandises sur les Grands Axes Européens: Recherche de Routes Alternatives Terre-Mer". Institut Français de la Mer, August 1993.

Below are the summarized findings of the analysis.[5] A certain percentage share is shown for road transport in all the corridors concerned, including those in which at some stage this transport would have had to cross sea lanes. This is because the mode of transport shown in the statistics is the mode used at the point at which the data were recorded, although more than one mode may have been used. The analysis shows the potential on these corridors for short sea shipping because all goods which at some stage have to be carried across sea lanes are potential targets for the longer sea route.

a. *Spain - United Kingdom*

Short sea shipping has already a market share of 81% (75.5% northbound and 87% southbound) of the total trade volume in this corridor. Road transport holds a share of 17% (22% northbound and 12% southbound). The remainder -- less than 2% -- is transported by rail and other modes. In terms of value, road transport represents 50%; short sea shipping holds a share of 33%. The total volume of trade in 1990 was 9,3 million tonnes, of which 4,5 million tonnes were south-north and 4,8 million tonnes were north-south.

38 to 40% of the road mode share of traffic could be shifted in the short and medium term to short sea shipping. The potential transfer in volume terms would be around 0,6 million tonnes (0,2 million tonnes south-north and 0,4 million tonnes north-south). This would represent approximatively 6% of the total traffic. A more difficult, long-term effort could shift additional traffic volume of 4 to 5% of the total traffic to short sea shipping. However, the amount of cargo that can in practice be transferred will be effected by the impact of the Channel Tunnel. This consideration also applies to the Portugal-United Kingdom corridor.

b. *Portugal - United Kingdom*

The share of short sea shipping in this corridor is 93% (93.6% south-north and 92.6% north-south) in traffic volume, but only 47.5% in value. Road transport accounts for 6.5% of traffic volume. (6.1% south-north and 7% north-south). The total volume amounts to 3,2 million tonnes (1,7 million south-north and 1,5 million north-south).

Because of the already high share of short sea shipping, it is estimated that less than 3% of the total traffic volume could be transferred in the short and medium term to short sea. The potential transfer in volume terms would be 100,000 tonnes. An additional 2.5% could be transferred in the longer term.

---

[5] Unless otherwise indicated, figures are for 1990/91 and indicate volumes for trade in both directions. Percentages are rounded. For an exhaustive analysis and the methodology, *see* the above-mentioned studies.

c. *Spain/Portugal - Germany*

In the trade of Spain and Portugal to Germany, road is the predominant mode of transport with more than 51% (similar share in both directions). Short sea follows with 23.5% (similar share in both directions). Rail carries 8.5% (12% north-south and 5% south-north) and 17% is carried by inland waterways (13% north-south and 20% south-north).

The total volume of trade between Portugal and Germany was 1,8 million tonnes (0,7 million north-south and 1,1 million south-north).

The total volume of trade between Spain and Germany was 7,4 million tonnes (3,7 million tonnes in each direction).

Short sea shipping could capture from road transport another 20% of the total traffic volume in the short and medium term and a further 13% in the long term, if it is able to compete for the expensive commodities trade. The volume transferable in the short to medium term would be 1,8 million tonnes (of which 0,5 million south-north and 1,3 million north-south).

d. *UK/Ireland - Italy/Greece*

Total traffic volumes between the UK and Greece are modest, standing at 220.000 tonnes northbound and 160.000 tonnes southbound in 1992. The direct short sea route is the long sea route via Gibraltar. The other alternatives are land transport combined with ferry crossings (Greece-Italy and France-United Kingdom/Ireland). The Channel Tunnel, when opened, will also play a role.

Short sea shipping suffers from fragmentation and a relatively low frequency of service. A relatively fast ro/ro vessel could complete the voyage in six days. Consolidation of cargo among existing operators could improve effective frequency to a service every 2 - 3 days. The greatest frequency at present is one service per week. This transit time could however only be achieved if, for northern Europe, a UK port was the last port of call and a Greek port the first in the eastern Mediterranean.

A higher proportion of the southern Italian market could also be captured by a "direct" short sea service if the problems of transit time and frequency of service were satisfactorily resolved. A direct ro/ro service could be attractive on cost grounds. Alternatively, East Mediterranean services could call in southern Italy en route for the UK. However, overall trade is limited and container lines already capture a substantial proportion of the market.

e. *Italy - Danubian Countries*

In 1989, short sea carried 31% (17% eastbound and 34% westbound) of the total traffic between Italy and the Danubian Countries[6]; 41% went by road (66% eastbound and 36% westbound) and 27% went by rail (16% eastbound and 30% westbound).

The possible transfer from land transport to the maritime mode could represent up to 6% of total traffic volume or 1,4 million tonnes (0,4 west-east and 1 east-west). The further development of sea-river traffic on the Danube and the possibility of further restrictions on road freight in Austria and Switzerland could mean further potential for transfer, even in the short term.

f. *Benelux/Germany - Nordic Countries/Baltic Sea*

Short sea shipping is the dominant mode of transport in this corridor, with 70% of total traffic from the Nordic countries and Poland to Benelux/Germany and 55 % from Benelux/Germany to the Nordic countries and Poland. Road transport accounts for 30 % of total traffic from Benelux/Germany to the Nordic countries and Poland, but for only 9% of the traffic from the Nordic countries and Poland to Benelux/Germany.

The total traffic between both regions has a volume of 175 million tonnes, of which 52 originated in Benelux/Germany and 123 in the Nordic countries and Poland.

A significant transfer is possible in the Benelux/Germany to Nordic countries/Baltic Sea trade. This is conditional on improvement of the overall cost position of short sea shipping through effective intermodal management.

More recent research conducted by the same consultants estimated that for example for the port of Zeebrugge alone the increase in short sea shipping traffic could be between 2 million tonnes and 4 million tonnes over the next ten years.

g. *Benelux/Germany - United Kingdom/Ireland*

Because of the insular position of the UK and Ireland, all transport of goods (except air travel) between these countries and the continent involved by definition a maritime component at least before the Channel Tunnel commenced operation. The objective on this corridor is to increase the use of those routes in which the maritime leg is maximised, the "direct" short sea routes.

---

[6] These include, for the purposes of this calculation, Austria, former Czechoslovakia, former Yugoslavia, Hungary, Romania and Bulgaria.

The main problem in increasing the "direct" short sea share of the traffic between Ireland and the Benelux countries is that of attracting sufficient volume to justify more frequent and faster sailings. The same is true of the southern and central corridor routes to mainland Britain which are in competition with the route through Northern Ireland, the "land bridge" route.

In the UK-Netherlands/Germany/Denmark corridor the "short sea" alternatives are the routes from North Sea ports as opposed to Channel ports.

h. *Benelux/Germany - Black Sea Area*

Short sea shipping represents 56 % of total traffic from Benelux/Germany towards the Black Sea Area but only 41% from the Black Sea Area to Benelux/Germany. Road transport represents only 18% of the total traffic from Benelux/Germany to the Black Sea Area, whereas it represents 34 % in the opposite direction. The volume involved is 5,2 million tonnes from Benelux/Germany to the Black Sea Area and 3,7 million tonnes from the Black Sea Area to Benelux/Germany.

There are no concrete estimates of how much additional traffic short sea shipping could capture. The main obstacle facing short sea shipping in this corridor is that of delivery time. Delivery is slow due to delays in ports, long sailing times and sometimes the sailing schedules of the shipping lines. The handling capability for containers is also poor in several ports in the Black Sea Area.

## 3. Summary

The survey shows that there are growth opportunities for short sea shipping in at least six of the eight corridors analyzed, including in particular Spain/Portugal to Germany, Spain/Portugal to The United Kingdom, Benelux/Germany to the Nordic countries and Benelux to the Northern region of The United Kingdom.

## ANNEX III: CHALLENGES FOR SHORT SEA SHIPPING IN EUROPE

A. Structural obstacles to the development of efficient Short Sea Shipping services

### 1. Lack of Integration

Lack of integration with other transport modes is a crucial problem of short sea shipping, as customers have increasingly come to request cooperation between sea freight, rail transport and land haulage, which inter alia concerns just-in-time transport logistics. This concept of manufacturing is based on a lower level of stockholding. It thus requires regular, frequent and reliable deliveries at agreed times. These levels of delivery performance are often as important to customers as cost levels. However, at present short sea shipping is seen as not being capable of meeting sufficiently these requirements.

Short sea shipping has not so far been well-integrated into the multimodal transport operation. Transshipment costs as a proportion of total costs are very often prohibitively high, particularly in the case of relatively short voyages by sea. Moreover, with the exception of some container feeder or existing door-to-door services, short sea shipping is still in need of significant improvement as far as punctuality, reliability and availability of services are concerned. It is thus not always a favoured partner in the organisation of multimodal transport chains.

Lack of integration is further hindered by the absence of widespread use of electronic data interchange (EDI), which helps to facilitate considerably the flow of cargo, promotes efficiency and reliability, and contributes to maritime safety. Another stumbling block to integration is that different types of cargo carrying units are being used in the different transport modes.

### 2. Regularity of Services

The regularity of service poses a major problem to short sea shipping. This results from trade imbalances in trading relations between parts of Europe. There is often a gap between imports and exports in trade between regions in Northern and Southern Europe. For example, in 1992 total unit load traffic between the U.K. and Greece was approximately 220.000 tonnes northbound and only 160.000 tonnes southbound. This, combined with the seasonal nature of some trades, hinders the development of regular short sea services. Trade imbalances can affect all transport modes. However, unlike road transport short sea shipping can less easily adapt to trade imbalances because it is less flexible in picking up additional cargo to fill the capacity available.

The regularity and flexibility of short sea shipping services could be improved to a certain extent if the operators of such services were to enter into cooperative agreements to promote joint services and to coordinate shipping schedules. Such agreements give operators greater opportunities to adjust their shipping schedules and frequency of sailings to reflect variations in demand.

### 3. Vessel Performance

A further comparative disadvantage of traditional short sea shipping is its lack of speed when compared to its competitors on European trade corridors, especially road. This leads to relatively long delivery or transit times. Delivery times are also affected by transshipment delays in ports. Often, vessel technology does not match the latest achievements in other transport modes. The resulting slowness is exacerbated by port-related deficiencies. The shorter the route, the more marked is the advantage of road transport. On longer routes, however, use of advanced technologies in the construction of vessels can contribute to shifting the modal balance in favour of short sea shipping.

### 4. Difficulties in Competitive Pricing

In view of certain disadvantages in terms of integration, regularity, speed and its somewhat negative image, it has been estimated that short sea shipping has to be at least 35% cheaper than other transport modes to stay competitive.[7] It appears not to be easy structurally for short sea shipping to achieve this competitive price level. Competitive pricing requires high load factors, which reduces unit costs. But the volume of cargo in the vicinity of a port is often insufficient to justify a regular high frequency service on a given link. This makes short sea shipping less attractive for shippers.

### 5. Administrative Barriers

#### *a. Documentation and Procedures*

The often rather complex documentation and administrative procedures in ports are obstacles to the development of short sea shipping. This is particularly true of customs procedures concerning either the cargo or the vessel. Information and documentary requirements are often not user friendly. Divergent application of the procedures in the Member States also cause problems.

---

[7] *See* MERC/NEA, "Mariniseerbare Ladingen (Cargoes that could go by sea)", July 1991.

Despite simplification of customs transit procedures since 1 January 1993, difficulties in maritime transport remain. The new Community transit system provides that goods transported within the Union can be assumed to be in free circulation in the absence of evidence to the contrary. Goods moved by sea are excluded from this assumption where the ship carrying them has also called at a port outside the Union (or a freeport in the Union) for loading or for discharging. This denies, to some extent, the benefits of the new regime to certain cargo shipped by short sea shipping. By the very nature of maritime transport, vessels often leave the territorial waters of the Community and call at third country ports. In such cases, it is necessary to prove the status of Community goods on arrival at the Community port of discharge. However, similar provisions apply to other means of transport. For example, when goods are consigned by road between Member States via the territory of a third country they must be placed under the internal Community transit procedure if the third country is an EFTA country. In the case of transit via non EFTA countries, it is necessary to prove Community status on arrival in the Member States of destination.

### *b. Veterinary checks*

A specific problem in the administrative field lies in the new veterinary check regime, in force since 1 January 1993[8]. It appears to have an adverse effect on short sea shipping in so far as transportation of goods of animal origin coming from a third country is concerned. This problem has been highlighted by the MIF.

There are different types of veterinary checks: physical, identity and documentary. Directive 90/675/EEC provides as a general rule, in the case of goods of animal origin entering the Community from third countries, for the veterinary checks to be carried out upon entry of these products into the Community territory at one of the border inspection posts. It provides that the physical checks may nevertheless be carried out in the port of final destination on condition that the cargo is transported by sea.

The fact that all checks are not being carried out in the same place causes problems for shipowners. The reason is that the original veterinary document does not always accompany the goods transported, as it is used by the carriers as a guarantee for banks at the port of final destination. Shipowners also complain that the different nature of the checks and the different level of inspections carried out in ports in Member States creates uncertainty and increases compliance costs.

---

[8] See Commission Decision 92/571/EEC relating to new transitional measures which are necessary to facilitate the move to the system of veterinary checks provided for in Council Directive (EEC) 90/675, O.J. No L 367/92 of 16.12.1992. See also Council Directive (EEC) 90/675, of 10 December 1990, laying down the principles governing the organization of veterinary checks on products entering the Community from third countries, O.J. No L 373, 31 December 1990.

### 6. Lack of Statistical Data

The lack of reliability and compatibility of the available statistical data on the transport of goods in general, and on shipping in particular, is a disadvantage. It makes accurate analysis of trade flows between ports and between regions difficult. This creates problems both for commercial development and policy making.

It means that market analysis and research relating to developing short sea traffic on existing routes and creating new routes is difficult to carry out. This discourages private operators from looking for new market opportunities. Lack of statistical data is also a barrier to effective policy making because it makes effective planning difficult for public authorities[9].

### 7. Image Problems

Some industry sources feel that, over and above the various practical difficulties described, the problem of the image of short sea shipping may be the most significant barrier to its development. They have often found a quite strong resistance on the part of people dealing with transportation in large companies to the idea of using short sea shipping even when reliable services are available.

Short sea shipping has, in some quarters, an old fashioned image which has prevented it from developing a stronger position in the transportation market. Services have often not been marketed effectively and shippers are sometimes even unaware of the services available. The improvement of its image requires appropriate marketing targeted at potential customers. The MIF Short Sea Panel has identified this as a significant barrier.

Many European shippers and forwarders are often not aware of existing short sea shipping services. When considering transport of goods, they think first in terms of road or rail and perceive shipping as concerned with intercontinental traffic. Shipping in the European context is identified with bulk transport only and usually not considered to be a real alternative or complement to land transport.

---

[9] For a more detailed discussion of this problem *see* Annex 5.

## B. Problems in the area of port infrastructure and port efficiency

### 1. Delays In Ports

A serious disadvantage for short sea shipping lies in the turnaround delays in ports, which partly result from lack of suitable infrastructure. This phenomenon is present in particular in the Southern European countries and also in Ireland. Generally speaking, the smaller ports in these countries have spent little on infrastructure in the last two decades, due to lack of financial resources. Turnaround delays can also result from the lack of smooth connecting links to inland infrastructure as well as inefficient port operations, where facilities are not adapted to present needs.

There appears for example to be a wide disparity in terms of container handling speed between the most efficient Northern European ports and many Southern European ports. The most efficient Northern European ports boast container handling speeds of up to 30 containers per hour, whereas some Southern European ports can only handle approximately half that level.

As a result of efficiency problems, ships can spend a considerable proportion of total transport time in ports, which increases costs. It has been estimated by the European shipowners that ships spend on average 60% of their total time in ports and only 40% at sea.

### 2. Port Charges

Port charges in Europe are in some instances disproportionately high. The result is a considerable competitive disadvantage for short sea shipping. In some specific cases, according to the MIF's Short Sea Panel, overall port expenses may account for 70 to 80% of the total cost of short sea shipping services. One source has estimated that average port costs per container transported by short sea shipping can vary from 55/75 ECU in many Northern European ports to over 200 ECU in some Southern European ports[10].

Port charges are not always transparent and in some ports users are obliged to pay for services which they neither need nor require. A ship calling in a port has to pay dues for services including pilotage, harbour and quay use. These depend usually on the ship size and type, the amount of cargo loaded or unloaded and the nature of the port and its facilities. Pilotage costs in particular may often be a relatively heavier burden on short sea ships than deep sea ships. Ships generally have to pay pilotage costs even if they do not require the service. A similar situation arises in many cases in relation to charges for towing. Further, high stevedoring charges in some countries lead to high overall port costs.

---

[10] Figures provided by MDS Transmodal, 1994.

In the context of port charges, reference should be made to the 1969 International Convention on Tonnage Measurement of Ships (Oslo Convention), which entered fully into force in July 1994. This Convention provides for changing the basis of tonnage measurement from Gross Registered Tonnage to Gross Tonnage. This change appears to have caused problems, in particular for owners of vessels more than 12 years old which have had to be remeasured. Apart from cargo handling, the heaviest costs in ports consist of pilotage fees, towage costs and port dues. The tariffs for these services are often and to a large extent based on the ship´s tonnage measurement. Shipowners claim that the changes result in much higher charges for some vessels.

### 3. Labour issues

While recognising that the situation of labour as well as the working conditions in ports have gradually been improving, existing restrictive labour regulations and practices still reduce the efficiency of port operations and have a considerable impact on cargo handling costs. Regulations and agreements which prevent port authorities and other interested parties from freely hiring qualified labour create distortions in the market. This is particularly significant where the maritime sector is in direct competition with land modes.

## ANNEX IV: AN INTEGRATED POLICY APPROACH FOR SHORT SEA SHIPPING IN EUROPE

### *The key target: Improving efficiency through modal integration*

Sustainable mobility requires multimodal transportation networks, in which the advantages of the individual modes are combined in a way which increases efficiency, reduces pressure on the environment and makes best use of existing resources. Short sea shipping is not yet contributing to these objectives.

The lack of integration into the multimodal transport chain is a core problem of short sea shipping. Short sea shipping will only develop its full potential if it is appropriately integrated in the transport chain. Modern trade and industry require door-to-door transport services and just-in-time delivery of goods and components. Integrated multimodal transport organisation, which guarantees regular and reliable service, can best meet these needs.

According to the results of the study mentioned above, the potential cargo transfer from other transport modes is sufficient to justify new investment in short sea shipping within the years to come. Action in favour of this transfer should, in the Commission´s view, not result in the creation of artificial advantages for short sea transport as compared to the other modes of transport.

### *Subsidiarity: An appropriate allocation of responsibilities for action*

The agenda for short sea shipping has a marked European Union dimension. European short sea shipping is largely international, as a large proportion of its trade is between states. Therefore, significant improvements in the performance of short sea shipping within the European Union will require coordinated action across national frontiers. For example, measures taken by Member States individually to improve the efficiency of their ports may turn out to be ineffective if they are not matched by actions in other Member States with whom there is trade. The development of combined transport including a maritime transport leg, the development of Electronic Data Interchange (EDI) networks and the enhancement of the role of short sea shipping in relations with third countries, also require actions at Community and international level.

The measures proposed in this Communication are to a great extent directed towards industry, port authorities or the Member States' national, regional or local authorities. Much of the impetus for development of short sea shipping will have to come from the industry or national or local administrations. The Community's own contribution to improving the competitiveness of short sea shipping lies in expanding research and development efforts as well as fostering integration, marketing and business opportunities for short sea shipping. In this context, the Commission will continue to liaise closely with the Maritime Industries Forum and, in particular, its short sea shipping panel. This will provide the maritime industries with an effective input into the preparation of Community policy-making and implementation of the proposed action programme.

## A. Improving the quality and efficiency of short sea shipping services

### 1. The Fourth Framework Programme of Research & Development - objectives for Short Sea Shipping

Previous research and development (R&D) programmes, such as EURET[11], COST[12] and APAS[13] have already benefited short sea shipping. A major impetus for R&D in waterborne transport is to be expected from the Community's Fourth Framework Programme of research and development (1994-1998)[14], in particular from the specific transport programme[15] as well as from inter alia the telematics applications programme[16].

---

[11] EURET = European Research and Development Programme for Transport, implemented under the Second Framework Programme for R&D.

[12] COST = European cooperation in the field of Scientific and Technical Research.

[13] The APAS programme has been established to prepare transport actions to be supported under the Fourth Framework Programme. It allowed the Commission to meet the needs of maritime transport research while the approval procedure of the various specific research programmes followed its course. Under APAS, a set of studies has been launched in 1994 which cover the assessment of the structure and organization of maritime transport, the analysis of supply and demand in short sea shipping, and the impact of changing logistics on maritime transport.

[14] Decision 1110/94 of the European Parliament and of the Council of 26 April 1994 concerning the fourth framework programme of the European Community activities in the field of research and technological development and demonstration (1994 to 1998); O.J. No L 126, 18 May 1994.

[15] Council Decision 914/94 of 15 December 1994 adopting a specific programme for research and development including demonstration in the field of transport (1994 to 1998), O.J. N° L 361/94 of 31 December 1994.

[16] Council Decision 801/94 of 23 November 1994, O.J. No L 334 of 22 December 1994.

The development of maritime transport research projects under this programme will contribute to the development of new shipping technologies and strengthen the competitiveness of the European maritime industries. A total budget of 240 million ECU is allocated for research in transport matters. About 45 million ECU, a substantial part of this budget, is available for the waterborne transport programme. Other more generic research and development activities will also have a beneficial effect on the maritime industries, such as research in telematics, communication technologies or industrial and material technologies.

In October 1993, the Commission organized a waterborne transport workshop with the maritime industries and the Member States. The workshop identified the most promising areas for research and development on waterborne transport to be developed under the Fourth Framework Programme. The Maritime Industries Forum has also put forward recommendations for action on technical concepts in the area of short sea shipping. The Commission´s priorities for research in waterborne transport have been established largely in the light of these two sets of recommendations and of contributions from the Member States.

Research and Development on fast waterborne transport systems and technology such as fast-cargo ships, self-unloading bulk carriers, automated unit-load ships and sea-river vessels should help to integrate short sea shipping better into multimodal transport chains. Other areas of the waterborne transport work programme, particularly the ports and logistics sections, will also have a major impact on the future development of short sea shipping.

The design of vessels can play a significant role in improving efficiency. Fast cargo ships could play an important role in developing short sea transport subject to sufficient cargo being available to justify such services and subject to the time savings being significant enough to justify higher energy and other costs. In order to fully exploit the potential of this type of ship, however, time spent in ports should be reduced.

Technology such as cargo information systems, self-unloading bulk carriers and automated unitload ships could considerably improve the efficiency of short sea shipping. Increased automation in the handling of goods on ships and between ships and quay could reduce the assistance required from the quayside and help reduce delays and costs considerably, particularly when vessels arrive outside normal working hours. Extended use of self-loading and self-unloading technology should also strengthen the role of smaller ports which will be in a position to attract more traffic without substantial new investment.

In addition, areas of the work programme of Telematics Applications for Transport aim at increasing the efficiency of short sea shipping as an alternative transport mode supporting the integration and optimisation of the logistical functions in the transport chain, the enhancement of vessel traffic services, the organised exchange of information and the consideration of additional EDI needs related to the movement of passengers, vehicles and freight.

The application of new technologies to shipping calls for qualified professionals in this sector. Training, educational and cultural differences create a gap between the professional capabilities and the exploitation of new automated systems. This problem requires support for training of workers in the shipping sector through interactive multimedia and distance learning technologies.

The waterborne transport part of the 4th Framework Programme also provides for the launching of a large-scale demonstration project for short sea shipping, integrating the results achieved under EURET, APAS and the Fourth Framework Programme in its different areas. The project will be prepared by the Commission and representatives of the Member States through an R&D concerted action on short sea shipping..

## 2. Integration into multimodal transport chains

### 2.1. *Pilot Schemes*

Much of the research and development efforts described above will foster integration of short sea shipping and make it faster, more reliable, more customer-oriented. However, the Commission believes that besides basic research, learning from practical testing of the possibilities offered by new methods, and exploration of new markets by pilot schemes is crucial. The Commission therefore has initiated a support programme for pilot schemes and intends to expand its support.

Current pilot schemes include feasibility studies or the actual setting up of specialised transport projects. Feasibility studies already supported or currently being supported by the Commission relate to:

- establishment of new maritime links between Ireland and the Continent by use of faster ships than the ones currently used;
- a short sea transport system based on automated unit load ships comprising originally Sweden, but now extended to Finland, Norway, Denmark, Germany, the United Kingdom, Ireland, the Netherlands, and Belgium;
- a combined transport system based on a maritime link between the UK and the eastern part of Germany;
- a possible new Ro/Ro service between Belgium and Northern Portugal.
- a possible new Ro/Ro service along the Mediterranean arc, i.e. the West coast of Spain, the South coast of France, and North-West coast of Italy.

The Commission intends to seek more financial resources in order to expand its support for such schemes. Schemes should focus on the following areas:

- the identification of potentially viable short sea shipping lines and markets, feasibility studies on specific pilot routes and, where appropriate and indispensable, the starting-up phase of pilot projects;

- studies and innovatory schemes aimed at improving the quality of short sea shipping multimodal transport services;

- the promotion of transfer of know-how between Community ports with considerable experience and expertise in short sea shipping operations and other ports with a potential for this type of transport;

- assistance in implementing EDI systems in ports;

- the promotion of cooperation between small and medium-sized short sea shipping companies as well as between them and other operators in the door-to-door chain, especially through joint-ventures established in accordance with EC competition rules.

Financial support for pilot-schemes will be provided on the basis of co-financing. The main requirement the projects will have to meet is a demonstration of their potential contribution to attracting current and future cargo flows from land transport, mainly road, to the sea on commercial terms. Co-financing of pilot-schemes should not have a real negative impact on competition between operators or ports, or artificially influence competition with land transport.

### 2.2. *The MARIS project*

The G-7[17] Ministerial Conference on the Information Society organized by the Commission and held in Brussels on 25/26 February 1995 approved eleven pilot-projects for the development of the Information Society in different sectors.

One of these projects is MARIS (Maritime Information Society). MARIS aims at integrating and enhancing environmental protection and industrial competitiveness for all maritime activities by means of information and communication technologies including applications in the area of safety and the environment, intelligent manufacturing and logistics networks. In general, MARIS will create a basis for the re-engineering of production and logistics processes in the maritime sector. It embraces four projects:

---

[17] Group of the seven most industrialized countries in the world (France, Germany, Italy, The United Kingdom, Canada, The United States and Japan).

- SAFEMAR - maritime safety and environment ;
- MARTRANS - logistics;
- MARVEL - industrial manufacturing;
- MARSOURCE - marine resources.

The MARTRANS project in particular will have a positive effect on the development of short sea shipping. It aims to set up a port logistic information network providing real-time information on cargoes and carriers. This will be achieved by interconnecting existing port community systems in the G-7 States as well as in the European Union and by stimulating the implementation of these systems in small and medium-sized ports. Ships and cargoes can be more efficiently matched. In essence, MARTRANS is expected to provide assistance in the development of competitive, reliable and quality transportation, which should increase cost efficiency by providing real time information.

### 2.3. *Combined Transport*

The Commission is of the opinion that short sea shipping should be developed into a fully integrated mode and a competitive alternative. Its role should not be limited to providing necessary and inevitable sea crossings as well as links to peripheral areas. The promotion of short sea shipping will have to be given greater prominence in future action and legislation by the European Community concerning combined transport. The traditional combined transport concept, as developed more than 20 years ago under Regulation (EEC) 1107/70,[18] concentrated on road/rail/inland waterway combinations.

Following the proposal of the Commission, the Council adopted in 1993 a Decision creating the trans-European network of combined transport[19]. This network includes rail and inland waterways lines, plus all transshipment installations between road, rail, inland waterways and sea. It aims to define the infrastructure which constitutes the combined transport network, such as for example port infrastructure. This was an important step towards the integration of short sea transport into the combined transport chains.

---

[18] Council Regulation (EEC) 1107/70 of 26 June 1970 on the granting of aids for transport by rail, road or inland waterway.

[19] Council decision 93/628 of 29 October 1993 concerning the establishment of a trans-European network of combined transport.

Under the PACT (Pilot Actions for Combined Transport) programme, launched in 1992[20], the Commission can grant financial support for combined transport pilot schemes. This programme concentrates primarily on road, rail and inland waterways transport. However, when a sea crossing is the only possible means of access to Union territory for a given region of the Union, sea routes may be covered.

One example of a scheme supported by PACT which involves short sea shipping is a combined transport corridor project from southern Germany to Patras in Greece. This project includes a sea route between Brindisi in Italy and Patras, and it aims at improving the overall quality and price reduction of the combined transport service on the route.

PACT currently includes three other projects with a maritime link, which concern the setting up of:

- a corridor between Ireland, the United Kingdom and France, across the Irish Sea and through the Channel Tunnel;
- a corridor from Norway/Sweden to Denmark and Germany;
- a sea corridor from the United Kingdom to Germany, continuing by rail into Germany (the Baltic by-pass).[21]

### 2.4 *Sea/river transportation*

Sea/river vessels are sea-going vessels which, due to their design features, are able to operate also on inland waterways. They enlarge the range of coastal shipping considerably and give a number of industrial centres located inland direct access to maritime transport. They can profit from cost and time savings because transhipment at sea ports is unnecessary. Moreover, economies can be made because cargo-handling costs at inland ports are generally lower.

The development of sea/river transport enables short sea traffic to penetrate deeper into the territories of Member States. It will increase the distances covered by short sea shipping and improve the viability of its operations.

---

[20] Commission Decision (EEC) 45/93 of 22 December 1992, concerning the granting of financial support for pilot schemes to promote combined transport.

[21] Another part of this project is financed as a short sea pilot scheme, *see* above A.2.1.

The Commission has initiated a fact-finding study to examine the market structure of sea/river transport on the main European inland waterways. The findings of the study indicate that the total annual sea/river transportation volume in the EU and EFTA states is approximately 15 million tonnes. In the period from 1982 to 1992 the overall volume increased by 25%.

According to the study, the use of sea/river vessels to transport bulk and break-bulk cargoes on certain routes can produce cost savings of between 10% and 20% of total transportation costs as compared to combined use of short sea and inland navigation. On certain routes sea/river transportation of containers is 5%-10% cheaper than the use of coastal vessels combined with barges or trucks. Thus, in the case of goods presently transported by road between Lyon and Rome, the use of the sea/ river alternative would reduce transportation costs by over 30%, although the transit time would be a few days longer. This alternative would also be cheaper than the road/sea route via a port such as Marseilles.

The R&D needs of sea/river transportation will be covered largely in the specific transport part of the Fourth Framework Programme.

In the context of research into the contribution of transport systems to sustainable development, it is important to take into account the ecological role of inland waterways. The specific programme on Environment and Climate addresses this issue.

### *2.5 Integrated Management Systems*

Since a crucial problem of short sea shipping is the lack of integration with other transport modes the port and the ship operator need to be integrated in their customers´transport chain and the accompanying information flow.

There are two main potential areas for future applications of innovative telematics aiming at increasing benefits, to improve total product quality and meet increasing demands through integrated management systems:

- the cooperative management of the cargo flow (e.g. common cargo tracking and tracing techniques), and
- the cooperative management of the employment of resources (e.g. of ships, transshipment equipment, storage places or staff).

Action by the Commission in this field will be to coordinate and participate in research, technological developments and demonstration work for the definition of systems, mainly for the following areas:

- the establishment of an open transport information network enabling small and medium sized enterprises and ports to participate in transport and logistic information networks;
- the cooperative management of the flow of cargo (e.g. cooperative cargo tracking and tracing);
- the cooperative management of the employment of resources (e.g. of ships, transshipment equipment, storage places or staff);
- human/system interfaces including multimedia communications to support the cooperative dialogue.

### 2.6 *Electronic Data Interchange (EDI)*

Traditional documentation systems are cumbersome, inhibiting efficient operation, increasing the possibility of error and raising administrative costs. Electronic Data Interchange (EDI) combined with adjusted and harmonised procedures, has an important part to play in improving the situation. As already mentioned above, EDI enhances the smooth flow of cargo, promotes efficiency, safety and reliability of short sea shipping and improves its links with other modes of transport.

EDI will only achieve its full potential if all the parties concerned (shippers, port authorities, stevedores, shipowners, etc.) participate in data interchange and ports are interlinked. Although the installation and use of EDI will be beneficial for both short and deep sea shipping, the access to real time information is more critical in short sea shipping. In this sector, ship/cargo transit times are much shorter, which leads to higher demands on rapid data flow.

The use of EDI is not as yet, however, sufficiently widespread within the maritime industries. To enhance the use of EDI all over Europe, and indeed worldwide, the use of common standards is important. In this perspective, the work of the UN/EDIFACT[22] board should be mentioned. The EDIFACT rules comprise a set of internationally agreed standards for the electronic interchange of structured data, particularly in trade in goods and services. However, the development of new EDIFACT messages is a long and laborious process which in general takes an average of three years.

Action by the Commission in the field of EDI will be as follows:

- The Commission will integrate requirements for information exchange in its proposals for Union legislation in the area of maritime safety, especially those concerning carrying of dangerous or polluting goods. This will provide a stimulus for further development of EDI. Other areas which might be of interest in this respect are customs procedures and veterinary checks.

---

[22] EDIFACT = Electronic Data Interchange for Administrations, Commerce and Trade.

- Initiatives aiming at increasing the maritime industries ' awareness of the usefulness of EDI, will be financially supported by the Commission.

- The Commission would be willing to support an initiative to create a task-force of EDI experts to provide technical assistance services to small ports and companies free of charge because the experts involved would be seconded from enterprises and companies with an interest in spreading the use of EDI.

- The creation of an EDI info-base will be supported by the Commission. This info-base will contain information on all available port-based EDI services and be continually up-dated.

## 3. Administrative framework and promotional activity

### 3.1. *Liberalisation of Maritime Cabotage: New Business Opportunities*

An important part of all cargo loaded and unloaded in European Union ports is domestic. In Member States with long coastlines maritime cabotage plays a significant role, particularly as far as bulk traffic is concerned. This is the case of Spain and Italy for instance, where the maritime sector handles respectively over 30% and over 20% of domestic trade. The corresponding figure for Great-Britain is also over 20%.

As mentioned before, one disadvantage of short sea shipping are the trade imbalances and the inflexibility of short sea shipping when reacting to these. The negative effect of trade imbalances on capacity utilization can be countered to some extent by the full freedom of cabotage. This will result in a decrease of traffic of empty vessels. Greater utilisation of capacity on board ships will further reduce overall transport costs for the user. It should also encourage shipowners to create new services thus expanding the maritime cabotage market.

Liberalising maritime cabotage improves the quality of services, reduces prices to the benefit of users and fosters the competitiveness of the Member States' short sea fleets. Opening up national markets also helps carriers to organise their supply of intra-Union services more efficiently. The liberalisation of maritime cabotage not only creates new business opportunities, it also helps to address the problem of trade imbalances through giving short sea shipping the opportunity to pick up cargo between two national ports.

The principle of free maritime cabotage has been in force in the Union since 1 January 1993. Council Regulation (EEC) 3577/92[23], applying the principle of freedom to provide services of maritime transport within Member States (maritime cabotage), removes legal constraints which prevented competition for maritime transport services within the Member States. Temporary derogations have been provided for specific cabotage trades, in particular island cabotage, in the five southern Member States. The derogations should provide sufficient time for a gradual adaptation to liberalisation. The full impact of the liberalisation of cabotage will, therefore, be realised only once all the derogations will have expired. The Commission will be submitting to the Council of Ministers in the near future its first report on the implementation of this Regulation.

### 3.2. *Improving the Image of Short Sea Shipping*

The image of short sea shipping needs to be enhanced and its performance highlighted through better marketing of its services.

Ports and shipping companies should make widely available on a regular basis updated information on services, lines and agents, types of cargo and ports of call. The Commission will support initiatives which aim at making such data available through EDI systems to the potential users and open information systems supporting integrated management.

The promotion of short sea shipping's competitive advantages relies on cooperation between shippers, shipowners, port authorities, other transport operators, governments and the Commission. In particular, the roundtables mentioned below[24] could promote co-operation between all the interested parties and contribute to the improvement of the marketing of short sea shipping services.

Training courses on short sea shipping are proposed in the framework of the UNCTAD's European TRAINMAR centres, with the aim of marketing and promoting the positive characteristics and potential of short sea shipping in Europe. Senior professionals from small and medium-sized enterprises in the areas of freight forwarding, multimodal transport operations, shippers and carriers participate in the training courses. The Commission participates in this programme. It intends to examine the possibility of enlarging its action in this area.

---

[23] O.J. No L 364/92, 12 December 1992, p. 7.

[24] *See* below, B.5.

### 3.3. *Administrative barriers*

#### *a. Documentary requirements and procedures*

Documentary requirements and procedures, particularly in ports, still constitute considerable obstacles to the smooth movement of cargo carried by maritime transport.

In intra-Union trade, documentary requirements and procedures relating to cargo and transport modes should be restricted to the minimum necessary and should as far as possible be the same everywhere in the Union and for all transport modes.

In a continuous effort on facilitation, the Commission has already introduced provisions to simplify the customs requirements by using commercial documents, notably the vessel´s manifest. The approach is to minimise the burden on trade, whilst preserving the necessary elements of control. An Ad-Hoc Group on maritime transport has been established within the framework of the Member States´ Customs and Transit Committee. This Group will address specific problems arising from documentation and procedures in maritime transport.

The Commission recommends in addition to Member States that:

- They should take into account the International Maritime Organisation (IMO) Facilitation Convention as far as documents and format are concerned, as well as a standard entry declaration relating to the safety certificates of the vessel.

- In areas falling within their sphere of competence, standards and controls for hazardous goods should be, where appropriate, equivalent for all transport modes in all Member States.

#### *b. Veterinary checks*

Problems arising from the current veterinary check regime as far as transhipment in a Community port is concerned appear to have an adverse effect on the transportation of goods of animal origin by sea.

The Commission has already moved to improve the situation in relation to where the checks are to be carried out. In the framework of the transitional measures[25] on veterinary checks, it has been provided that in cases of transshipment in a port, the physical and identity checks shall be done in the port of final destination, though a documentary check still has to be carried out in the former port. It is intended to extend these measures until the end of January 1996. The Commission also adopted a Decision on the reduced frequency of physical checks of harmonised products to be imported from third countries.[26] This Decision should in principle enter into force in February 1996. In this Decision, the levels of inspection of the different products of animal origin to be carried out by Member States have been laid down. However, further harmonisation of import conditions are necessary and will be proposed in the near future.

The Commission intends to propose in the near future a modification of Directive (EEC) 90/675 in order to establish a definitive checking regime which will restrict checks as far as possible to the port of final destination. However, it is intended still to provide for the possibility for documentary checks to be carried out in the border inspection post of arrival in cases where the competent authority wishes to do so.

### 3.4 *Statistical data*

The disadvantages resulting from the lack of reliability and compatibility of the available statistical data on the transport of goods including maritime transport have been outlined above.

In 1994, the Commission put forward a proposal for a Council Directive to improve the provision of statistical data on transport by sea[27] .

The adoption of the Directive will extend the range of information available on the carriage of goods and passengers and on the vessels carrying them to or from ports in the European Union. The data to be supplied with regard to goods will include in particular volume, types of cargo, ports of origin and destination, nationality of transport operator and information on vessels used. An approach at Community level will ensure that the data are comparable, comprehensive, consistent and regular.

---

[25] Commission Decision 92/571/EEC relating to new transitional measures which are necessary to facilitate the move to the system of veterinary checks provided for in Council Directive 90/675, O.J. No L 367 of 16.12.1992. The Decision was last amended by Decision 94/659, O.J. No L 256, 4 October 1994.

[26] Commission Decision 94/360/EC of 20 May 1994 on the reduced frequency of physical checks of consignments of certain products to be imported from third countries, under Council Directive 90/675/EEC, O.J. L 158, 25 June 1994.

[27] O.J. No C 214 of 4 August 1994. Proposal for a Council Directive on statistical returns in respect of carriage of goods and passengers by sea. COM/94/ 275 final.

This Directive concerns maritime transport in general rather than short sea shipping in particular. Its structure, however, will allow for the necessary short sea shipping data to be obtained.

Further Commission actions on data supply include:

- the recent launch of a study, pending the adoption and the implementation of the directive, on intra- and extra-Community seaborne trade. The study will, inter alia, estimate, in cases where the existing data is insufficient, seaborne trade flows between the Member States and between the Community and third countries in volume and value terms as well as on their origin and destination. These trade flows will, moreover, be broken down by nationality of operator, owner and of flag in order to establish the relevant trends;

- the launching or co-financing of studies aiming at the identification of potential markets on the basis of trade flows in order to favour the shift of traffic from land to maritime transport.

### B. Improving port infrastructure and port efficiency

Actions to improve the short sea transport product must be combined with actions to improve port efficiency in order to substantially improve the competitiveness of short sea shipping. Ports provide the essential link between maritime, land and inland waterway transport. Only if ports perform efficiently as an integrated part of the transport chain, can the full benefits of short sea shipping be achieved.

Ports must therefore provide:

- efficient, demand-oriented infrastructure which adequately links the different transport modes;
- services and equipment to transfer goods smoothly between transport modes;
- management and labour arrangements which can maximise the potential of the physical investments; and
- arrangements under which operators provide open and competitive services.

In the context of port-related problems, The Commission envisages a global approach which is based on the following elements:

- Improvement of infrastructure in the context of the trans-European transport network plan and the Regional and Cohesion Funds;
- Research and Development for ports, also aimed at improving port efficiency and minimizing delays;
- Improvement of transparency in ports, related to tariffs and state aids;

- Application of EC competition rules to ports, which would address monopolies, abuses of dominant position and restrictive practices in ports;
- An enhanced dialogue between all parties involved, addressing all possible problems in a pragmatic way;
- Improvement of information infrastructure in the context of the Information Society initiative and the trans-European telecommunications network.

## 1. Ports and the trans-European networks

### 1.1 The trans-European transport network plan

Community guidelines for the development of the trans-European transport network have already been proposed by the Commission to the Council and the European Parliament.[28] This proposal provides for the progressive development of a single multi-modal network throughout the Community by the year 2010.

The network covers road, rail, inland waterway, combined transport, port and airport infrastructure and appropriate traffic management and control systems. In the area of waterborne transport, provisions concerning vessel traffic management and information for European waters are included in the Commission's proposal. This aims at improving efficiency and safety in maritime transport as well as the protection of the environment. It includes the development of VTMIS[29] and SAR[30] infrastructure, radio navigation infrastructure for the positioning of vessels and information systems on transit of ships through Community waters. The appropriate Telematics applications and infrastructure will be provided from actions planned under the trans-European telecommunications network. Under the proposal, the network is to be extended to third countries in Central and Eastern Europe, the Mediterranean and the NISs (Newly Independent States).

---

[28] COMA(94)106 final, Proposal for a European Parliament and Council Decision on Community Guidelines for the Development of the Trans-European Transport Network, 7 April 1994. This proposal was amended on 22 February 1995; *see* document COM(95)48 final.

[29] Vessel Traffic Management and Information Systems.

[30] Search and Rescue at Sea.

The Commission´s proposal does not provide for a defined network of ports of Community interest. Member States feel that network-related action may discriminate against ports which are not part of the network. Further, maritime transport is not confined to rigid lines of infrastructure. Instead, the proposal focuses on port and port-related infrastructure projects of common interest. It does not seek to limit the ports in which these projects may arise to those tied directly to the land elements of the network. In principle, these projects can arise in a much wider range of ports in the Community, both sea ports and sea-river ports. It should be noted that at least 15 to 20 of the Community´s inland waterway ports are also sea/river ports. The development of these ports can contribute to the promotion of sustainable mobility and therefore deserve more emphasis in transport policies.

Under the proposal, port projects of common interest must conform to a set of general principles appropriate to all modes and a set of special conditions specific to ports. The specific aims and conditions require that the projects should either facilitate the growth of Community trade, support the principle of sustainable mobility, in particular by promoting short sea shipping, or improve accessibility and strengthen cohesion. An important condition is that the projects should be viable on the basis of a financial or social cost/benefit analysis. This is important both to measure the efficiency of the proposed projects and to avoid any distortions of competition between ports.

Further, the proposal also requires the Commission to specify the projects, and other broad lines of measures, with the assistance of Member States acting in a Committee on Transport Infrastructure. In order to assist the Committee, the Commission will be preparing a report which will not only propose projects and other broad lines of measures, but will also explain the context in which the proposals are being made. This will be prepared with the assistance of the Member States Group on Ports and Maritime Transport[31] which has established a number of Regional Groups[32] to study the issues in depth.

The revised Commission proposal of February 1995 emphasises more strongly the importance of short sea shipping through the incorporation of a provision for short sea shipping projects as well as ports infrastructure projects in a new Annex III on projects of common interest.

---

[31] This group was established by the Commission. It is chaired by the Commission services and attended by Member States, Observer States such as Norway, and by port and shipping experts.

[32] Regional port working groups were established for the North Sea, the Atlantic Sea, the Baltic Sea and the Mediterranean Sea areas. Bordering third countries participate in the meetings of the Baltic and Mediterranean groups.

Implementing these projects and improving the efficient flow of traffic through the ports should enable short sea shipping to compete more effectively against land transport.

Community support under the trans-European network budget line will be available for projects of common interest financed by the Member States and identified in the context of the Community guidelines. A Commission proposal for a Council Regulation laying down general rules for the granting of Community financial aid in the field of trans-European networks[33] is under discussion in the Council and Parliament. Support may also be available for port and port-related projects from the European Regional Development Fund and the Cohesion Fund, in accordance with the rules under which these funds operate.

Sea/river port projects considered of common interest will in principle also be eligible for Community funding under the trans-European transport network plan.

Because of the competitive element between ports, Community support will be limited in such a way which ensures that no undue distortion of competition result. Finally, it is important that existing infrastructure capacity in ports is used as efficiently as possible before new infrastructural projects are undertaken.

## 2. Improvement of Transparency

### 2.1 *Port tariff transparency for short sea users*

Transparency in port tariffs is of direct concern to port users, who have a clear interest in knowing the basis on which charges for services have been calculated so that they may make an informed choice between those on offer.

Pilotage costs may often be a relatively heavier burden on short sea ships than deep sea ships. However, short sea vessels have shallower draughts and their masters visit the same ports more frequently and are often familiar with the conditions. Ports or Member States should consider reviewing pilotage charging systems for short sea shipping vessels. With regard to sea/river transport, Member States should, where possible, grant sea/river vessels exemption from pilotage in ports and maritime access channels, if inland navigation is exempted from these charges.

The Commission also recommends that port authorities ensure that tariffs charge only for services actually required and rendered. In this context, ports should follow a "user-pays" approach with all tariffs clearly identified. The basis for calculation of tariffs should be transparent so that the shipping lines know in advance what the likely charges will be.

---

[33] COM/94/62, of 2 March 1994.

Further, it is recommended that ports and port service providers, when port tariffs are based on Gross Tonnage of the vessels, as provided by the Oslo Convention, should set their tariffs in such a way that no undue profits are made at the expense of shipping in general and short sea shipping in particular.

### 2.2 *Transparency duties under State aid rules*

State aid must not allow a port to reduce tariffs in order to undercut the tariffs of its competitors and thus to attract business, or to provide services at similar tariffs, but with less efficiency than its competitors.

In order to ensure respect of the Treaty rules on State aid, the Commission is starting an inventory of all transport State aid granted by Member States to ports as well as action to improve the transparency of the financial accounts of entities responsible for providing transport infrastructure and services. It envisages the establishment of guidelines on how to apply the State aid provisions of the Treaty to the port sector.

In general, the guidelines are likely to clarify how Article 92 is interpreted by the Commission with regard to infrastructure projects and a distinction may be drawn between improvements in the public interest and of general benefit (including safety and environmental action) for which Article 92 might not apply and support for commercial interests where it would apply. State aid for superstructure projects, mobile assets, operational services and restructuring programmes would be assessed under the normal rules of Article 92 and guidance would be given on types of aid eligible for authorisation by the Commission.

## 3. Application of Competition Rules

The application of Article 85 the Treaty which prohibits restrictive agreements between undertakings and of Article 86 which prohibits abuse of dominant positions together with the regulation of State monopolies pursuant to Article 90 of the Treaty is of overall importance in improving efficiency and customer-oriented services. Full application of competition law will thus help reduce inefficient port operations which causes delays, exaggerated prices for port-users, and certain employment-related problems, as in the case of the provision of monopoly services.

The judgement of the European Court of Justice in the port of Genoa case[34] made it clear that port monopolies for dock workers granted by a Member State which facilitate or make abuse of dominant positions possible are incompatible with Article 90 (1) and Article 86 of the EC Treaty.

---

[34] Decision of 10 December 1991, Case C179/90 - Merci Convenzionali Porto di Genova vs. Siderurgica Gabrielli.

There are other operations in ports which can also affect competition. The Commission has studied the relations between port authorities and terminal operators, paying particular attention to exclusive rights granted to operators and the way in which the tariffs are determined. It is at present studying the relationships between port authorities and other service providers, such as pilots and boatmen. It will consider what further action might be appropriate in the light of these studies.

### 4. Labour Issues

Major efficiency improvements in ports could be achieved by a relatively simple step on working hours. The absence of essential port services during evening, weekend and mid-day hours in many ports has been identified as an important source of delay. Introducing 24 hour services, especially for health and customs checks, in ports where there is sufficient demand, could remedy delay problems considerably. Efficient operation of ships may also require the availability of handling facilities round-the-clock.

Restrictive labour practices in ports are in the course of being changed in many Member States, particularly in the context of the growing trend towards the privatization of port terminals. Member States and port authorities should strive to satisfy user demand for longer port service hours to make maritime transport more competitive, while at the same time improving working conditions and employer-employee relationships.

### 5. Dialogue among partners

Given the variety of responsibilities in the area of port-related issues, an enhanced dialogue between port bodies (such as port and customs authorities), port service providers (such as stevedores and terminal operators), and port users (ship owners, agents, shippers, freight forwarders) is particularly important in finding pragmatic solutions to port problems. The port community is best placed to address these problems and improve the operating conditions for short sea transport through a concerted action and with a minimum of administrative involvement.

The Commission supports the setting up of informal discussion structures, such as round tables. Besides creating a discussion forum for the problems mentioned above, these round tables could provide a forum for industry and public administration to discuss required adaptation of relevant legislation. They could also examine the exact demands of the market (shippers and freight forwarders) in order to bring a shift from land to sea transport. The round tables should be set up in the first instance at local port level. Besides this local approach, national round tables, involving the central administrations, should be set up to address problems which can not be solved at local level. In some European countries, such round tables have already produced encouraging results.

A Workshop of these round tables was organised with Commission support in the framework of the Short Sea Panel of the Maritime Industries Forum in Marseilles in May 1995. The Workshop brought together the interested parties to discuss hindrances in shipping and possible solutions. It aimed at enhancing the activity of the already existing round tables and providing a kick-starter for some other local port or national round tables.

Another pragmatic way to solve port problems is the encouragement of industry expert visits to ports. The Short Sea Panel of the MIF organised an industry expert visit to ports in Southern Europe to identify problems of these ports and propose specific solutions. The mission appears to have initiated a constructive dialogue between the parties involved. As a follow-up to these missions, the secondment of industry experts to ports for longer periods, up to some months, could be envisaged.

The Commission, having already financially supported the expert mission organised by the MIF, will take the following actions:

- initiate further expert missions;
- consider requests to support follow-up missions, particularly if they are arranged within the framework of the MIF or the round tables referred to above;
- support visits and training programmes for managers of ports of peripheral areas to highly developed ports in other parts of the European Union. These visits should focus on gaining experience in planning and operation of port activities.

## C. Preparing short sea shipping for a wider Europe

### 1. The implications of a wider Europe

The EU is actively engaged in a process of developing political and economic links with adjoining States. This process should lead to significantly enhanced opportunities for further developing short sea shipping since it increases the average length of goods transportation journeys.

The accession of Sweden and Finland should lead to the further development of economic links already strengthened by the EEA agreement. The emergence of market economies in other States in the Baltic area should provide opportunities for short sea shipping. Poland, in particular, has recently shown strong signs of economic growth and its trade with the EU is increasing significantly. This growth is particularly relevant in this context in view of Poland´s maritime importance.

Political and economic changes in the Black Sea area should lead to increased trade with countries in this region. This area also constitutes a bridge between Europe and the Middle East and East Africa. In many cases, Black Sea States are the closest sources of raw materials and semi-finished products and at the same time are markets for EU products and technologies.

In so far as the Mediterranean area is concerned, exploratory discussions between the Commission and Cyprus and Malta with a view to possible accession to the Union have already begun. As these are States of considerable maritime importance, their accession would provide new opportunities for maritime transport. Links with other Mediterranean States are also of growing importance.

There have been large-scale efforts to restore the links between the Union and the Central and Eastern European countries (CEECs) and the Newly Independent States (NISs). These countries face important infrastructural challenges. The answer to transport needs cannot be the development of land infrastructure only. Such a policy implies enormous financial investments which will be spread over several years. The relatively bad shape of the infrastructure and the backlog in infrastructure investments will continue to result in congestion and create further environment problems. It is important that maritime transport and ports infrastructure is fully taken into account at a time when fundamental decisions affecting the future transport policies of these countries are being made.

The Commission will stress, where appropriate, the need to promote short sea shipping when Central and Eastern European or other States (e.g. Mediterranean or Black Sea countries) request Union support for projects or studies related to transport infrastructure. In the area of port infrastructure, Union support for feasibility studies and port master plans will take into consideration the importance of developing short sea links with the Union.

The second Pan-European Transport Conference held in Crete in mid-March 1994 has welcomed the steps taken hitherto to develop a Europe-wide transport policy. The participants also agreed that there should be cooperation on developing and implementing trans-European transport networks. There was also widespread support for action to further develop short sea shipping within the context of a Europe-wide transport policy.

## 2. Extending the trans-European networks

The international character of short sea shipping calls for, in as far as possible and where appropriate, participation of administrations and operators of third States in the implementation of the action programme proposed in this Communication. Most of the subjects covered are of interest to them.

Following the results of the Crete conference, the Commission is preparing the extension of the trans-European transport network concept to Central and Eastern Europe and the Newly Independent States,as well as to the southern Mediterranean, with the identification of 9 multimodal priority corridors. Of these, one is the Danube river, ideally suited for sea-river shipping; and many of the other corridors end at a port. The designation in Crete of these priority corridors is a recognition of the possibility of Community financing of particular projects on, or related to, these corridors. This is in line with the conclusions of the European Councils of Edinburgh and Copenhagen referring to the need to support the development of transport infrastructure in European countries which are not members of the Union. It reflects also the conclusions of the Corfu and Essen summits on the need to prepare the CEECs for accession to the Union.

Projects linked to the development of short sea shipping, which by their very nature encourage links between Eastern and Western Europe, ought therefore to be promoted through technical assistance programmes to the CEECs and the NISs.

### 3. Developing new structures for cooperation (Working parties on waterborne transport)

The Black Sea Working Party for Waterborne Transport was created by the Ministerial Conference on transport challenges in South-Eastern Europe (Black Sea), held in October 1993 in Constanza (Rumania). The aim of this Working Party is to discuss pragmatic solutions for problems in the waterborne transport sector. It has met in Rumania in September 1994, following a preparatory workshop held in Brussels in April 1994.

The Black Sea Working Party is pursuing a three-year work programme which aims at:

- developing the potential for waterborne transport, mainly short sea shipping, in the area;
- mapping out a way of integrating Black Sea ports into the European transport system and the trans-European transport network;
- encouraging action which will raise the levels of efficiency of Black Sea ports;
- developing logistical systems and improving procedures;
- developing EDI systems.

Work already undertaken in the framework of the Baltic Sea Conference of Ministers of Transport as well as the Council of Baltic Sea States resulted in a workshop on Ports and Maritime Economy organised in Finland in November 1994. This workshop examined, inter alia, the co-ordination of port development in the region on the basis of a study on the ports of the Baltic Sea region undertaken in the framework of the PHARE programme which was completed in 1994. The results of this study will be the basis of forthcoming assistance to the ports of the Baltic Sea.

A Conference on the prospects for the development of shipping in the Baltic Sea region was organised in Copenhagen by Denmark and the Commission on 22/23 May 1995. The conference decided to set up a Working Group on Waterborne Transport for the Baltic Sea. The Working Group will prepare and adopt a multi-annual work programme to be submitted to the Baltic Sea Conference of Ministers of Transport.

The Commission organised a regional conference for the development of maritime transport in the Mediterranean Sea area which took place in April 1995 in Barcelona. The intention was to take up the conclusions of the Essen summit concerning the reinforcement of cooperation with countries from the Mediterranean area and to follow-up on the work carried out in the Christophersen Group. The Conference also aimed at exchanging information on shipping in the Mediterranean, at assessing the competitive position of shipping in this area, and at enhancing awareness of the importance of subjects such as the need to further develop short sea shipping, convergent implementation of safety standards, improvement of port efficiency and the facilitation of maritime trade in the region namely through the interconnection of ports in the context of the trans-European networks.

A Working Group on Waterborne Transport in the Mediterranean was established to identify areas for further cooperation in shipping and to address matters of common interest in the context of a multi-annual rolling work programme. It is intended that the Group submits a progress report to the Commission in view of the Euro-Mediterranean Intergovernmental Conference which will be held in Barcelona in November 1995.

The programmes pursued by the Working Parties will provide a context and a starting point for examination of proposals for assistance to maritime transport projects under PHARE, TACIS and the Mediterranean programme.

## 4. Further Commission action

The Commission further envisages the following actions to bring about the integration of neighbouring states into a wider European waterborne transport network:

- the launching of a comprehensive study on port development in the Black Sea area including an assessment of the shipping and port policies of these countries;

- a pilot-project supported by Finland relating to "Telematics in Foreign Trade Delivery Management" was accepted by the Christophersen Group[35] on the trans-European transport network as a priority project to be developed in the coming years. The project aims at more effective use of multi-modal transport links between Baltic Sea countries and between these countries and the Union.

The Commission will favour, where appropriate and requested, projects linked to the development of short sea shipping in technical assistance programmes to the Central and Eastern European Countries and the Newly Independent States.

---

[35] Christophersen Group = High level group of personal representatives of the heads of State and government chaired by former Commission Vice-President H. Christophersen. The group identified priority projects of common interest for the development of trans-European networks in the fields of transport, energy and environment. It presented its final report to the European Council of Essen in December 1994.

## ANNEX V: STATISTICAL DATA -- A STATISTICAL OVERVIEW OF SHORT SEA SHIPPING

The lack of comprehensive, reliable and compatible statistical data makes a detailed analysis of trends and influences on short sea shipping difficult. This, in turn, leads to problems in planning and developing commercially sound strategies.

As the existing Eurostat database is restricted to non-harmonised national statistics of the European Union Member States, it has its limitations for studies of a much smaller scope (e.g. interregional) or for individual short sea shipping operators who want, e.g., to forecast future traffic demand in a certain region or transport relation. The Eurostat external trade database does not supply port or regional statistics; data on non-EC Member States can only be compiled through the import data of the 12 reporting countries. Such demands would have to be met by national or port databases, if they exist.

For a number of reasons the comparison of short sea shipping flows derived from different data bases is a delicate matter:

- there are a number of definitions of short sea shipping: hence, depending upon the definition used in an analysis, flows may vary considerably;
- to the extent that analyses are based upon external trade data, however, definitions of import and export data may not correspond because there are different statistical agencies involved;
- cargo flows are often disaggregated into classifications of goods in order to appraise the importance of particular categories of goods. Unfortunately, many such classifications exist, e.g. SITC, NSTR, CN, etc., all of them differing in one or more aspects from the others. Cargo flows based upon different databases using different goods classifications are therefore hardly comparable.

As the current Eurostat data base on external trade by mode of transport is limited to import and export data, transit -- an important cargo flow in countries such as Belgium or the Netherlands -- is either lost or has to be compiled from other data bases. Here again problems of inconsistent data arise. Due to certain particularities in the collection of the statistical data it is generally felt that 29% is an underestimate of short sea shipping´s share of intra-European trade between Member States and that the real share is above 30%.

Moreover, since 1 January 1993 the problem has worsened due to the fact that Eurostat data on the transport of goods between Member States are no longer available.

These problems mean that market research on existing routes and the potential for new routes is difficult to carry out which in turn discourages private operators from considering such options. At the same time, they create a barrier to effective policy making by public authorities.

It is expected that many of the statistical problems referred to above will be resolved in the context of the application of the provisions of the proposed new directive on statistics mentioned earlier.

**Volumes of goods transported internationally**

The total volume of goods (imports) transported (excluding by pipeline) between the European Union countries amounted to 685 million tonnes in 1992[36]. Of this, the proportion carried by each mode of transport was as follows (percentages are rounded):

| | |
|---|---|
| road | 43% |
| sea | 29% |
| inland waterways | 20% |
| railway | 7% |

In 1992, 76% of EC imports, excluding pipelines, from 5 EFTA States (Norway, Sweden, Finland, Austria and Switzerland) were transported by sea. 95% of imports from 7 Mediterranean States (Turkey, Israel, Egypt, Libya, Tunisia, Morocco and Algeria) were transported by sea, again excluding pipelines.[37]

**The importance of feeder services**

Within short sea transport, maritime feeder services[38] are probably the fastest growing sector. The feeder share of European container flows has increased from 30% in 1982 to 43% in 1992.[39] There has been a marked concentration of deep sea services, especially for general cargo, in a few ports closest to the largest European markets, i.e. the Northwest of Europe. Most container ships on international routes serve the whole of Europe in one single voyage to achieve cost savings. From a cost point of view it is no longer appropriate to call at secondary ports for smaller cargo volumes.

---

[36] Source: Eurostat. Data concerning Ireland are estimates.

[37] Source: Eurostat.

[38] Feeder services are maritime services connecting smaller ports to the international trans-ocean traffics of containerised goods, these goods being transshipped to or from a deep sea containership. Feeder vessels carry containers port to port mainly on behalf of deep sea lines.

[39] *See* MDS Transmodal, "The European Container Freight Market - Containers by Sea", 1994.

As a consequence, feeder services have been developed, linking the hub ports with ports not directly served by intercontinental shipping services. These services have captured from road transport a significant proportion of the additional intra-European transport flows generated by the decline in the number of ports served by deep sea liners. It is expected that the role of maritime feeder services will continue to grow.[40]

**Traffic flows between European Union Member States (1992).**[41]

Table 4 shows total international intra-Union transport flows in 1992, excluding goods transported by pipeline.

*Table 4* International intra-Union **total** transport flows, excluding pipelines (1992 figures, '000 tonnes)

| | destination | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| origin | BLEU | DK | France | FRG | Greece | Ireland | Italy | NL | Port | Spain | UK | total |
| BLEU* | | 793 | 34.369 | 23.566 | 375 | 388 | 5.222 | 29.033 | 651 | 1.997 | 5.663 | 102.057 |
| DK | 444 | | 799 | 7.513 | 105 | 56 | 1.269 | 1.183 | 117 | 207 | 2.771 | 14.465 |
| France | 19.860 | 682 | | 30.865 | 1.024 | 791 | 20.489 | 8.353 | 3.077 | 10.952 | 9.991 | 106.083 |
| FRG | 21.132 | 4.839 | 23.022 | | 1.017 | 722 | 17.321 | 47.104 | 916 | 4.037 | 10.496 | 130.606 |
| Greece | 200 | 157 | 1.202 | 1.148 | | 40 | 4.666 | 505 | 12 | 650 | 1.014 | 9.593 |
| Ireland | 255 | 64 | 693 | 1.017 | 18 | | 265 | 659 | 29 | 148 | 5.253 | 8.402 |
| Italy | 2.041 | 499 | 10.744 | 12.565 | 1.764 | 139 | | 1.592 | 1.563 | 3.456 | 3.416 | 37.779 |
| NL | 40.658 | 1.504 | 13.445 | 72.071 | 962 | 978 | 8.569 | | 1.165 | 2.527 | 12.533 | 154.413 |
| Portugal | 476 | 100 | 1.184 | 1.286 | 60 | 24 | 524 | 510 | | 2.942 | 1.786 | 8.892 |
| Spain | 1.626 | 566 | 7.825 | 4.645 | 438 | 237 | 3.470 | 2.602 | 4.805 | | 4.293 | 30.506 |
| UK | 6.379 | 3.001 | 14.642 | 19.770 | 694 | 8.302 | 7.459 | 13.935 | 1.482 | 6.788 | | 82.452 |
| total | 93.071 | 12.206 | 107.924 | 174.446 | 6.458 | 11.677 | 69.251 | 105.475 | 13.816 | 33.704 | 57.217 | 685.247 |

* = BLEU includes Belgium and Luxembourg
*Source : EUROSTAT*

---

[40] CATRAM, "Opportunities for Coasting and Feedering Services - Contribution to the promotion of a project for restoring the dynamics of the ports of the Atlantic seabord", December 1993.

[41] The tables on traffic flows are based upon Eurostat data and relate to *imports*. Data concerning Ireland are unfortunately not available. The figures for Ireland which are included in the tables are based on exports data provided by the reporting countries. The mode of transport indicated is the mode used at the point at which the data were recorded. There are some slight discrepancies in the tables due to the rounding off of the figures.

The following table shows the origin and destination countries for intra-Union maritime transport flows:

*Table 5* International intra-Union **maritime** transport flows (1992 figures, '000 tonnes)

| origin \ destination | BLEU | DK | France | FRG | Greece | Ireland | Italy | NL | Port | Spain | UK | total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLEU * | | 453 | 2.811 | 671 | 295 | 287 | 1.668 | 251 | 474 | 965 | 5.652 | 13.527 |
| DK | 221 | | 270 | 3.417 | 69 | 52 | 782 | 701 | 88 | 97 | 2.766 | 8.463 |
| France | 1.009 | 267 | | 719 | 886 | 749 | 5.391 | 1.215 | 2.241 | 1.975 | 9.965 | 24.419 |
| FRG | 821 | 1.926 | 1.409 | | 482 | 353 | 581 | 1.136 | 483 | 1.315 | 10.472 | 18.978 |
| Greece | 140 | 149 | 1100 | 167 | | 39 | 4.236 | 403 | 9 | 641 | 1.012 | 7.896 |
| Ireland | 138 | 59 | 631 | 569 | 15 | | 108 | 470 | 21 | 107 | 2.635 | 4.753 |
| Italy | 509 | 280 | 3.092 | 363 | 1.453 | 27 | | 272 | 1.192 | 1.714 | 3.409 | 12.309 |
| NL | 1.218 | 966 | 2.682 | 2571 | 752 | 851 | 1.324 | | 975 | 1.473 | 12.517 | 25.330 |
| Portugal | 356 | 79 | 573 | 545 | 57 | 21 | 254 | 322 | | 356 | 1.783 | 4.347 |
| Spain | 947 | 493 | 1.965 | 577 | 421 | 206 | 1.796 | 1.489 | 2.230 | | 4.255 | 14.379 |
| UK | 5315 | 2.953 | 13.930 | 15.090 | 640 | 4.452 | 5.586 | 12.879 | 1.312 | 6.063 | | 68.221 |
| total | 10.675 | 7.627 | 28.463 | 24.689 | 5.069 | 7.039 | 21.726 | 19.138 | 9.027 | 14.706 | 54.465 | 202.623 |

* = BLEU includes Belgium and Luxembourg

*Source : EUROSTAT*

These data show that geographical factors as well as a country's maritime traditions greatly influence the extent to which short sea shipping is used. For example, transport flows to and from the United Kingdom have their origin or destination mainly in France, Germany and the Benelux-countries. For Ireland, the sea link with the United Kingdom is by far the most important. Denmark's major flow is to and from Germany. For Greece, Italy is the major maritime relation, with France a distant second. Italy's major relations are with the United Kingdom, France, Greece and the Iberian countries. The largest short sea shipping transport flows in Europe involve islands such as Britain and Ireland and other peripheral regions for which there is no practical alternative. Tables 6, 7 and 8 show intra-Union trade flows carried by rail, road and inland waterways.

*Table 6* International intra-Union **rail** transport flows (1992 figures, '000 tonnes)

| origin \ destination | BLEU | DK | France | FRG | Greece | Ireland | Italy | NL | Port | Spain | UK | total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLEU* | | 10 | 3.773 | 2.558 | 14 | 2 | 1.101 | 1.350 | - | 55 | - | 8.865 |
| DK | 1 | | 27 | 39 | 1 | - | 139 | 3 | - | 1 | - | 211 |
| France | 2.290 | 100 | | 2.820 | 26 | 2 | 5.858 | 225 | 16 | 774 | - | 12.110 |
| FRG | 2.706 | 262 | 2.882 | | 95 | 8 | 7.212 | 699 | 21 | 315 | - | 14.201 |
| Greece | 9 | 1 | 2 | 79 | | - | 40 | - | - | - | - | 130 |
| Ireland | - | - | 1 | 5 | - | | 50 | 63 | - | 3 | 74 | 196 |
| Italy | 197 | 78 | 712 | 2.097 | 10 | 13 | | 57 | 7 | 34 | - | 3.206 |
| NL | 477 | 4 | 1.177 | 2.997 | 15 | - | 931 | | - | 26 | - | 5.627 |
| Portugal | - | - | 3 | 6 | - | - | 2 | - | | 103 | - | 115 |
| Spain | 25 | 3 | 166 | 368 | - | - | 151 | 19 | 233 | | - | 965 |
| UK | 47 | - | 74 | 345 | 1 | 51 | 441 | 8 | - | 82 | | 1.049 |
| total | 5.751 | 459 | 8.818 | 11.312 | 163 | 78 | 15.923 | 2.425 | 278 | 1.394 | 74 | 46.675 |

* = BLEU includes Belgium and Luxembourg

*Source : EUROSTAT*

*Table 7* International intra-Union **road** transport flows (1992 figures, '000 tonnes)

| origin \ destination | BLEU | DK | France | FRG | Greece | Ireland | Italy | NL | Port | Spain | UK | total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLEU * | | 329 | 26.101 | 13.517 | 64 | 98 | 2.450 | 18.490 | 174 | 968 | 8 | 62.201 |
| DK | 192 | | 461 | 3.880 | 35 | 4 | 347 | 441 | 29 | 109 | 3 | 5.502 |
| France | 14.345 | 314 | | 18.119 | 110 | 38 | 9.229 | 3.951 | 806 | 8.194 | 9 | 55.115 |
| FRG | 11.898 | 2.644 | 16.464 | | 403 | 261 | 9.381 | 25.104 | 401 | 2.373 | 9 | 68.936 |
| Greece | 44 | 7 | 99 | 434 | | 1 | 374 | 63 | 3 | 9 | - | 1.034 |
| Ireland | 116 | 5 | 48 | 327 | 3 | | 106 | 109 | 7 | 37 | 2.536 | 3.293 |
| Italy | 1.319 | 140 | 6.927 | 9.691 | 299 | 97 | | 1.229 | 334 | 1.699 | 1 | 21.736 |
| NL | 16.028 | 534 | 6.272 | 20.985 | 188 | 122 | 2.507 | | 177 | 1.025 | 12 | 47.851 |
| Portugal | 112 | 20 | 603 | 372 | 3 | 3 | 266 | 94 | | 2.482 | 1 | 3.955 |
| Spain | 619 | 67 | 5.680 | 2.983 | 11 | 31 | 1.514 | 743 | 2.323 | | 4 | 13.975 |
| UK | 899 | 40 | 565 | 3.416 | 49 | 3.778 | 1.428 | 876 | 165 | 623 | | 11.840 |
| total | 45.572 | 4.101 | 63.221 | 73.725 | 1.165 | 4.433 | 27.604 | 51.099 | 4.418 | 17.519 | 2.583 | 295.439 |

* = BLEU includes Belgium and Luxembourg

*Source : EUROSTAT*

*Table 8* International intra-Union **inland waterway** transport flows (1992 figures, '000 tonnes)

| origin \ destination | BLEU | DK | France | FRG | Greece | Ireland | Italy | NL | Port | Spain | UK | total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLEU * | | - | 1.673 | 6.773 | - | - | - | 8.757 | - | - | - | 17.203 |
| DK | 30 | | 38 | 162 | - | - | - | 38 | - | - | - | 268 |
| France | 2.210 | - | | 9.077 | - | 1 | - | 2.960 | - | - | - | 14.248 |
| FRG | 5.695 | - | 2.237 | | - | 96 | - | 20.153 | - | - | - | 28.181 |
| Greece | 6 | - | - | 464 | | - | - | 35 | - | - | - | 505 |
| Ireland | 2 | - | 12 | 113 | - | | - | 15 | - | - | - | 142 |
| Italy | 14 | - | 1 | 346 | - | - | | 33 | - | - | - | 394 |
| NL | 22.933 | - | 3.309 | 45.434 | - | 3 | - | | - | - | - | 71.679 |
| Portugal | 8 | - | 3 | 359 | - | - | - | 61 | | - | - | 431 |
| Spain | 35 | - | 11 | 702 | - | - | - | 339 | - | | - | 1.087 |
| UK | 114 | - | 14 | 849 | - | - | - | 166 | - | - | | 1.143 |
| total | 31.047 | - | 7.298 | 64.279 | - | 100 | - | 32.557 | - | - | - | 135.281 |

* = BLEU includes Belgium and Luxembourg

*Source : EUROSTAT*

The following table shows international intra-Union maritime transport flows as a percentage of total transport flows.

*Table 9* International intra-Union **maritime** transport flows in relation to total transport flows, excluding pipelines (1992 figures, %)

| origin \ destination | BLEU | DK | France | FRG | Greece | Ireland | Italy | NL | Port | Spain | UK | total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLEU* | | 57.1% | 8.2% | 2.8% | 78.6% | 74% | 31.9% | 0.9% | 72.9% | 48.3% | 99.8% | 13.3% |
| DK | 49.8% | | 33.8% | 45.5% | 65.0% | 93.1% | 61.6% | 59.2% | 75.4% | 46.6% | 99.8% | 58.5% |
| France | 5.1% | 39.2% | | 2.3% | 86.5% | 94.7% | 26.3% | 14.6% | 72.8% | 18.0% | 99.7% | 23.0% |
| FRG | 3.9% | 39.8% | 6.1% | | 47.3% | 49.0% | 3.4% | 2.4% | 52.8% | 32.6% | 99.8% | 14.5% |
| Greece | 70.2% | 94.8% | 91.5% | 14.5% | | 98.1% | 90.8% | 79.9% | 77.1% | 98.6% | 99.9% | 82.3% |
| Ireland | 54.0% | 91.6% | 91.0% | 56.0% | 82.2% | | 40.9% | 71.3% | 74.1% | 72.6% | 50.1% | 56.6% |
| Italy | 24.9% | 56.1% | 28.8% | 2.9% | 82.3% | 19.6% | | 17.1% | 76.2% | 49.6% | 99.8% | 32.6% |
| NL | 3.0% | 64.2% | 19.9% | 3.6% | 78.2% | 87.1% | 15.5% | | 83.7% | 58.3% | 99.9% | 16.4% |
| Portugal | 74.8% | 79.4% | 48.4% | 42.4% | 95.1% | 87.6% | 48.6% | 63.1% | | 12.1% | 99.8% | 48.9% |
| Spain | 58.3% | 87.1% | 25.1% | 12.4% | 96.1% | 87.0% | 51.8% | 57.2% | 46.4% | | 99.1% | 47.1% |
| UK | 83.3% | 98.4% | 95.1% | 76.3% | 92.3% | 53.6% | 74.9% | 92.4% | 88.5% | 89.3% | | 82.7% |
| total | 11.5% | 62.5% | 26.4% | 14.2% | 78.5% | 60.3% | 31.4% | 18.1% | 65.3% | 43.6% | 95.2% | 29.6% |

* = BLEU includes Belgium and Luxembourg

*Source : EUROSTAT*

**The present structure of the Short Sea Shipping fleet**

The following data on the structure of the short sea shipping fleet is limited to vessels intended for the transport of cargo and/or passengers.

It is recognised that the use of different criteria can alter the apparent make-up of a fleet. Fleet profiles have been compiled by ownership/nationality rather than by flag/registration. Because of the widely established practice of flagging out to international registries, it was felt that ownership was a better indicator of fleet characteristics.

For the purposes of these statistics, short sea shipping vessels are considered to be those of less than 6.000 GT. However, it is recognized that in practice larger ships are also active in short sea shipping and that smaller vessels also engage in some deep sea transport. The profiles of the short sea and deep sea shipping fleets (European Union, rest of Europe and rest of the world) are summarized in Table 10 below.

*Table 10* Summary of the European Union, Rest of Europe and Rest of the World Fleets (1992)

| | | N°(%) | GT(%) | DWT(%) | Average age years | Average GT |
|---|---|---|---|---|---|---|
| European Union | Deep sea | 42.7 | 92.1 | 93.3 | 14 | 25.958 |
| | Short sea | 57.3 | 7.9 | 6.7 | 20 | 1.654 |
| Rest of Europe | Deep sea | 37.3 | 88.6 | 90.8 | 13 | 24.598 |
| | Short sea | 62.7 | 11.4 | 9.2 | 21 | 1.882 |
| Rest of the World | Deep sea | 31.5 | 90.4 | 91.1 | 13 | 27.155 |
| | Short sea | 68.5 | 9.6 | 8.9 | 18 | 1.319 |

*Source : Policy Research Corporation N.V. Data supplied by Lloyd's Register.*

The short sea share of the total cargo carrying fleet is broadly similar, both in terms of number and average GT, in the European Union, the rest of Europe and the rest of the world. However, small differences can be seen, particularly in the average size and age of short sea shipping vessels (the rest of the world average is somewhat smaller than in the European Union; the average age is slightly lower in the rest of the world fleet than in the European Union and the rest of Europe).

Average age is important as it is indicative of the replacement cycle of a fleet. It can be seen that the short sea shipping fleet of the three regions is on average significantly older than the deep sea fleet, which suggests a lower level of innovation in these vessels. New buildings completed or expected to be completed in the 1991-1993 period were not likely to improve the average age significantly as they represented only 2 % of the total fleet.

As regards the distribution of ship types in the short sea and deep sea fleets, ships are categorized into five main types: liquid cargo, dry cargo, container ships, Ro-Ro and others[42].

---

42 Liquid cargo vessels include liquefied gas carriers, chemical tankers, oil tankers, oil/chemical tankers and other tankers. Dry cargo vessels include dry bulk, dry bulk/oil, self-discharging dry bulk and other dry bulk. Container vessels include fully cellular container ships. Ro-Ro vessels include Ro-Ro cargo ships and passenger/Ro-Ro. Others vessel types include general cargo, passenger/general cargo, refrigerated cargo, passenger and other dry cargo.

*Table 11* Summary of the European Union, rest of Europe, and rest of the World Fleet Characteristics (1992)

| Ship type | | Short Sea | | | | Deep Sea | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | N°(%) | GT(%) | Average age | Average GT | N°(%) | GT(%) | Average age | Average GT |
| European Union | Liquid cargo | 20 | 21 | 14,8 | 1,793 | 23 | 37 | 9,8 | 43,943 |
| | Dry cargo | 2 | 3 | 17,9 | 2,244 | 37 | 40 | 9,8 | 29,554 |
| | Container ships | 2 | 3 | 11,8 | 3,450 | 10 | 9 | 7,6 | 25,096 |
| | Ro/Ro | 12 | 16 | 17,8 | 2,127 | 7 | 4 | 12,5 | 13,458 |
| | Others | 64 | 57 | 17,5 | 1,459 | 23 | 10 | 13,7 | 11,354 |
| Rest of Europe | Liquid cargo | 14 | 17 | 18,1 | 2,351 | 27 | 44 | 9,7 | 41,118 |
| | Dry cargo | 1 | 2 | 24,0 | 2,470 | 28 | 30 | 12,1 | 25,963 |
| | Container ships | 1 | 1 | 1,5 | 2,934 | 2 | 2 | 3,4 | 18,753 |
| | Ro/Ro | 10 | 8 | 16,0 | 1,491 | 10 | 7 | 9,0 | 16,664 |
| | Others | 74 | 72 | 20,5 | 1,829 | 33 | 17 | 14,0 | 12,553 |
| Rest of the World | Liquid cargo | 26 | 23 | 14,0 | 1,210 | 22 | 40 | 11,3 | 48,130 |
| | Dry cargo | 4 | 5 | 20,0 | 1,518 | 36 | 37 | 15,5 | 27,957 |
| | Container ships | 1 | 3 | 14,0 | 3,400 | 9 | 8 | 11,0 | 26,382 |
| | Ro/Ro | 8 | 9 | 16,0 | 1,397 | 6 | 4 | 11,0 | 19,185 |
| | Others | 61 | 60 | 18,8 | 1,306 | 27 | 11 | 17,8 | 10,702 |

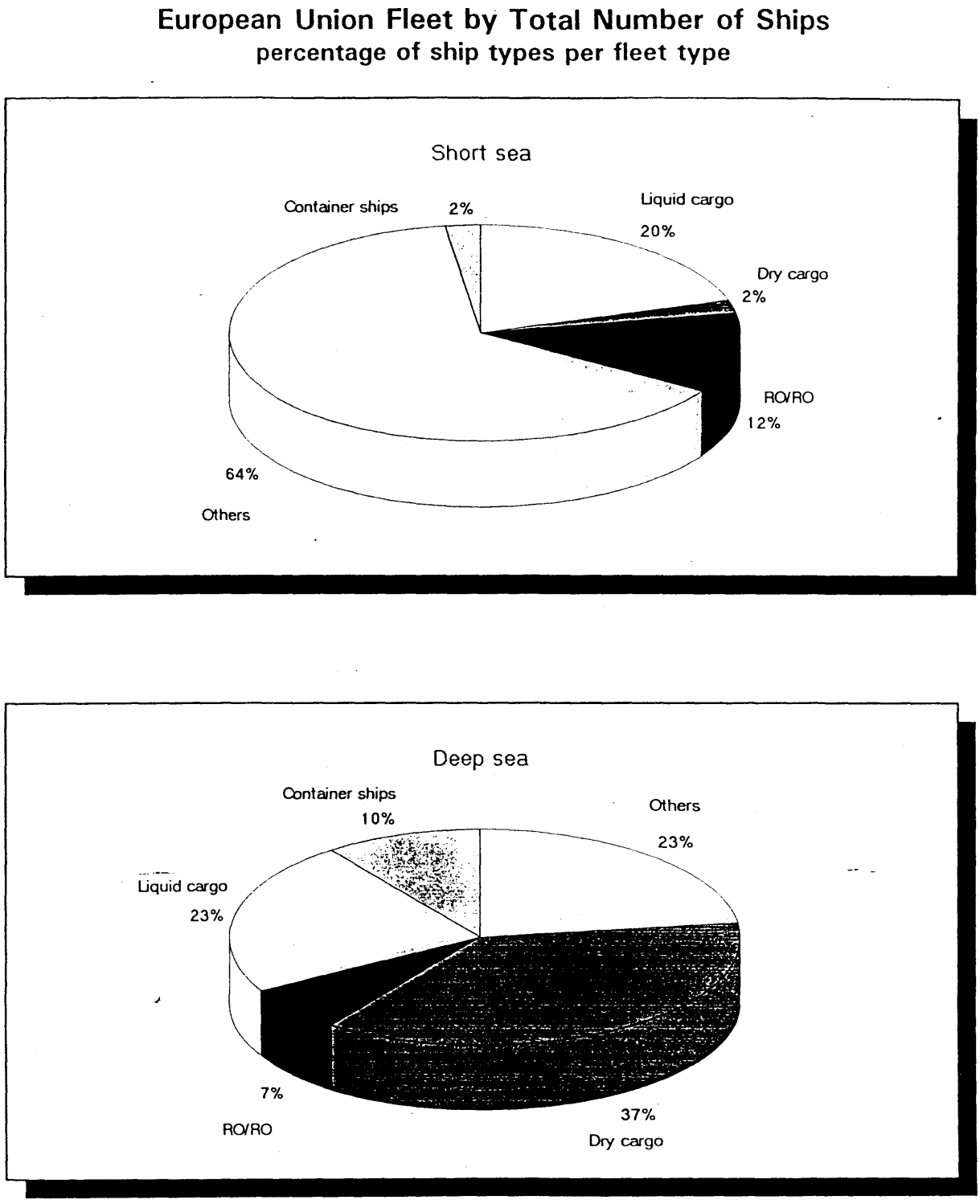
*Source : Policy Research Corporation N.V. Data supplied by Lloyd's Register.*

'Other ship types' constitute between 57 % and 72 % of the short sea shipping fleet in the European Union, rest of Europe and rest of the world, mainly because of the large proportion of general cargo ships. General cargo ships account for 45,3 % of the total European Union short sea shipping carrying capacity. Figures 1, 2 and 3 at the end of this annex show the break-down into their component parts of the short sea and deep sea fleets of the European Union, the rest of Europe and the rest of the world. Liquid bulk is the second most important ship type, accounting for between 17 % and 24 % of the total carrying capacity. The Ro/Ro category is proportionately more important in short sea shipping in the European Union than in the rest of Europe and the rest of the world in terms of gross tonnage but this is much less true in terms of its share of the number of vessels. This reflects the rapid increase of the average size of Ro/Ro vessels in the European Union. Liquid cargo is important in short sea shipping (21 %), but dry cargo takes only a minor share of the total European Union short sea shipping carrying capacity (3 %).

**Summary**

Most vessels employed in short sea transport have characteristic features which distinguish them from ocean-going vessels. In contrast to deep sea container transport, which is generally carried out with cellular container ships, short sea shipping, for the most part, continues to use multi-purpose dry cargo vessels. Short sea Ro/Ro vessels are in general all-round vessels which are more or less suitable for all existing types of wheeled cargo or for all cargo capable of being horizontally loaded or discharged. Recently built coasters are especially characterised by a high flexibility in their operational possibilities; smaller units have mostly canal-going ability (sea/river going vessels.

**Figure 1 : Ship type composition of the European Union Fleet (number of ships)**

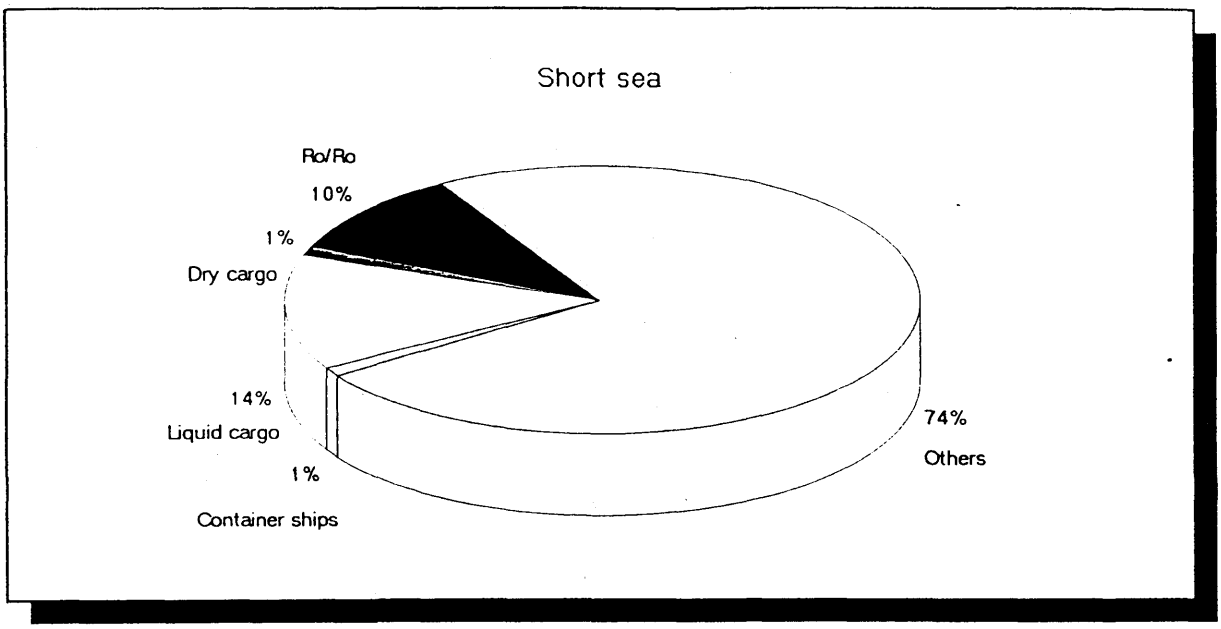


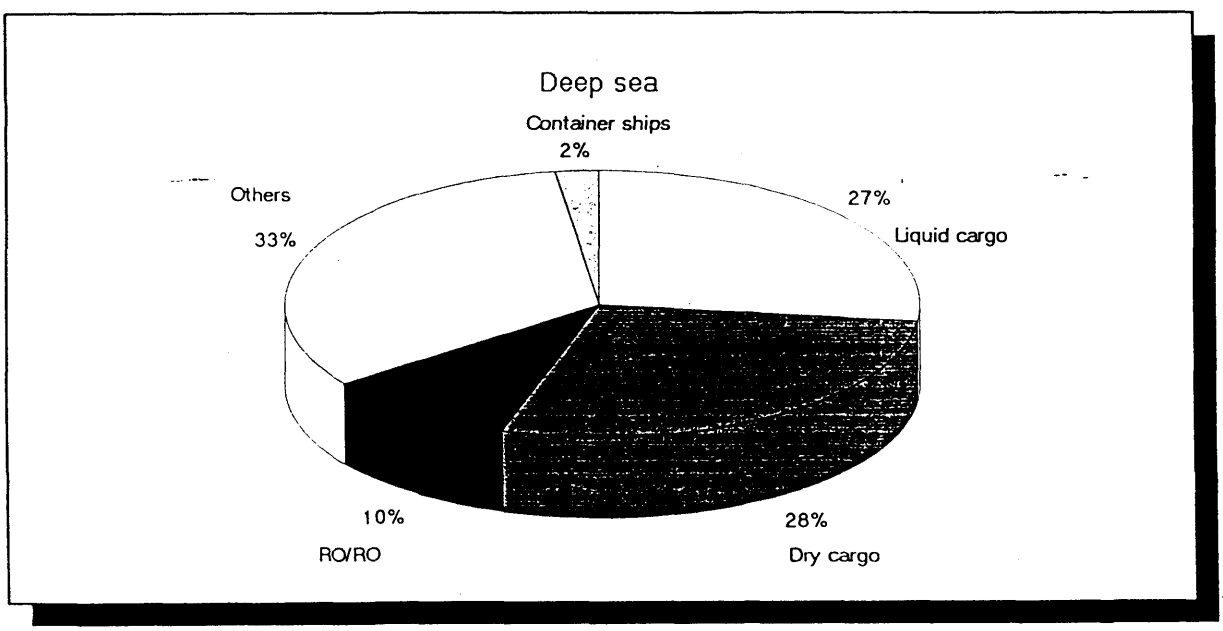

Source : Policy Research Corporation, 1993

**Figure 2 : Ship type composition of the "Rest of Europe" fleet (number of ships)**

## 'Rest of Europe' Fleet by Total Number of Ships

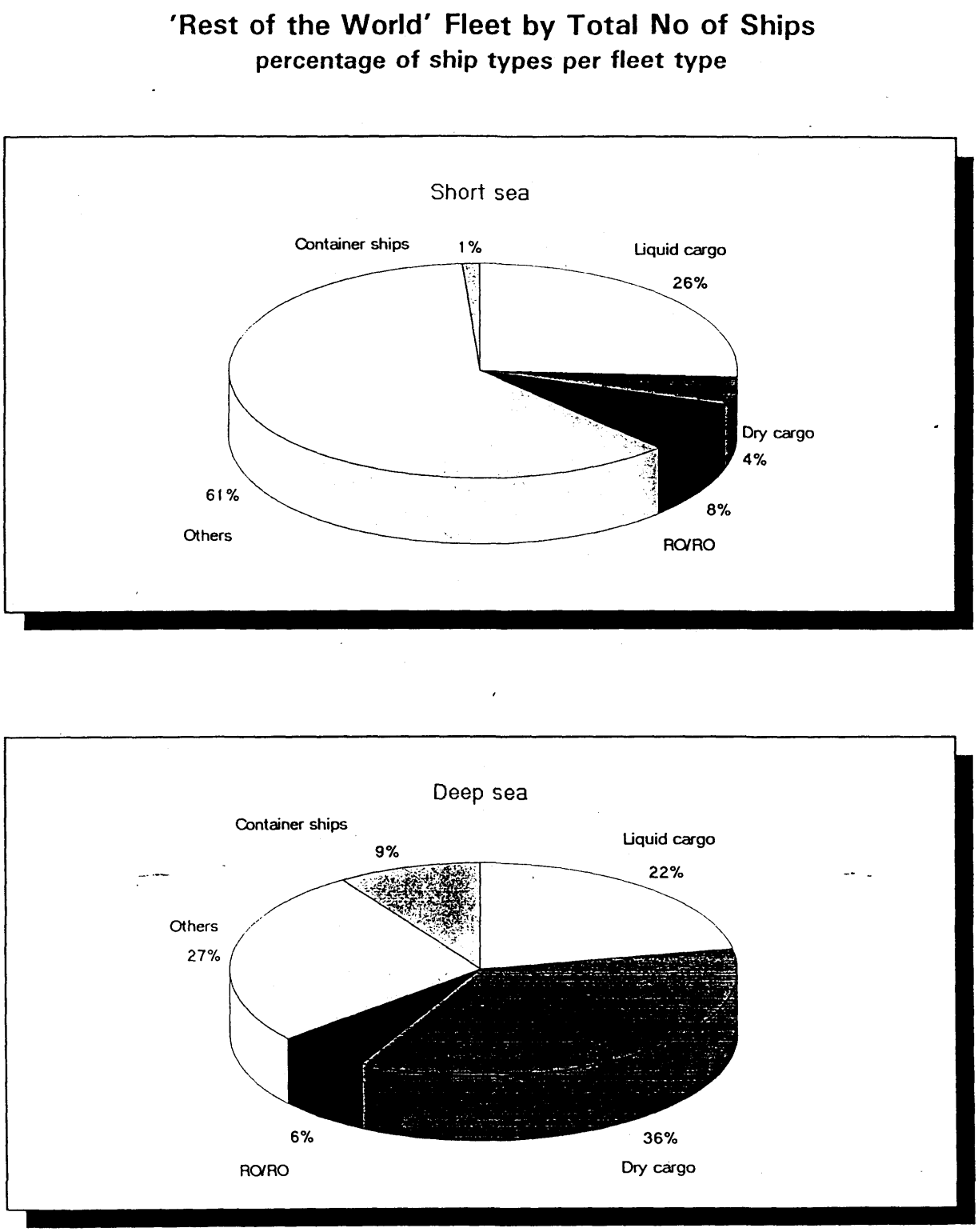
### percentage of ship types per fleet type




Source : Policy Research Corporation, 1993

Figure 3 : Ship type composition of the "Rest of the World" fleet (number of ships)




Source : Policy Research Corporation, 1993.

ISSN 0254-1475

COM(95) 317 final

# DOCUMENTS

EN 07

Catalogue number : CB-CO-95-364-EN-C

ISBN 92-77-91504-8

Office for Official Publications of the European Communities

L-2985 Luxembourg