GREEN PAPER
ON SEA PORTS
AND MARITIME INFRASTRUCTURE

(presented by the Commission)
EXECUTIVE SUMMARY

1. Sea ports are vital to the European Union both in terms of trade and transport. Europe’s competitiveness in the global economy increasingly depends on an efficient and cost effective transport and port system. The Community’s port sector handles more than 90% of the Union’s trade with third countries and approximately 30% of intra-EU traffic, as well as facilitating the movement of more than 200 million passengers every year. Moreover, ports are also important centres of regional, economic and social development and act as essential interface between seaborne and land-based modes of transport.

2. The completion of the internal market, technology changes in the transport sector and the ongoing development of inland transport networks across Europe have intensified competition significantly among ports. As a result, ports in different Member States are now, more than ever before, competing for trade. In the past ports have tended to remain on the sidelines of the EU’s transport policy debate. The time has now come to redress this situation, and to focus on the key issues relating to ports in today’s competitive environment.

3. The purpose of this paper is therefore to launch a wide ranging debate on individual port issues and possible future policies which should help to increase port efficiency and improve port and maritime infrastructure by integrating ports into the multimodal trans-European network and which should also meet the Community’s responsibilities under the Treaty to ensure free and fair competition in the port sector. The Commission suggests a number of possible measures which can be applied in the context of existing policies, and identifies other policy areas, in particular in the fields of port charging and market access, in which new initiatives should be considered. These suggestions, on which the Commission seeks the views of interested parties, are summarised in the following paragraphs.

Ports and specific aspects of the Common Transport Policy

Ports and the trans-European Transport Network

4. The Commission considers the full integration of ports into the TEN-T desirable for the establishment of the multimodal network taking into account, in particular, the need to ensure links to the peripheral areas and to encourage short sea shipping. A proposal to adapt the present guidelines for the development of TEN-T accordingly is being presented in parallel to this Green Paper.

Enlarging the Community and connections to neighbouring countries

5. The future enlargement of the EU emphasises the need for extending the trans-European networks to the neighbouring countries in order to integrate their transport systems more effectively with those of the Union. The port and maritime sector is of considerable importance to the economies of a number of those countries expected to join in the first round of accession and substantial investment will be needed in transport operations and infrastructure (including ports) both prior to and following accession to promote their convergent development with the rest of the Community. The Commission will continue to work with all neighbouring third countries in the relevant fora in order to identify projects of mutual interest and to use available funds in the most efficient manner.

Ports as transfer points in the intermodal transport chain

6. In order to optimise the role of ports in the door-to-door transport chain proper infrastructure links to the TEN-T are vital. However, equally important are other measures such as standardisation of loading units, integration of telematics etc. The Commission will support actions to improve the port’s position as intermodal transfer points including financing of research and demonstration projects in the area of management systems, and measures to foster innovation and support the development of a competitive intermodal transport system.
Encouraging the development of Short Sea Shipping

7. The streamlining of procedures in ports, e.g. by enhancing information and management systems, is a key issue pinpointed by the Commission in its policy to promote the development of short sea shipping. This policy also gives priority to short sea projects in the framework of the trans-European networks and continues to support actions through research and development and the new PACT programme. Furthermore, the Commission recognises that the pricing policy for other modes of transport is an important factor for the development of short sea shipping. The Commission intends to take this issue forward with a new communication on infrastructure charging in a multimodal perspective.

The role of ports in maritime safety

8. A sustainable transport system can only be achieved if the safety legislation in force in the Community is properly respected. Therefore, the Commission will continue its efforts to ensure effective and uniform compliance with international legislation by all ships entering EU ports and the harmonised application within the Community of IMO and ILO provisions related to the ship/port interface, such as cargo-handling, techno-nautical services, and protection of workers involved in cargo operations.

Protection of the environment

9. To ensure environmentally friendly solutions in the port sector and at sea, the Commission finds it is important to enhance the present availability and adequacy of reception facilities in all EU ports. The Commission will also continue its work in fostering new technology in order to make port operations as efficient as possible and ensure a better use of existing facilities as well as the development of integrated coastal management, including strategic environmental assessment.

Research and development

10. The Commission will continue to support maritime and port projects under the present and future R&D programmes. In its proposal for the 5th Framework Programme on RTD the Commission has included two key actions which are relevant to port related research: “Sustainable Mobility and Intermodality” and “Marine Technologies”. The future R&D should also provide tools to allow policy makers to assess different policy scenarios, such as the ones needed to follow up this Green Paper.

Financing and charging for ports and maritime infrastructure

11. The ownership, organisation and administration of ports vary between and within Member States, thus leading to great diversity in the port sector. While accepting that it should be left to the Member States to decide upon the ownership and organisation, a key issue from a competition point of view is the financial flows between the public authorities, the port authorities, the port operators and the users of the port facilities and services.

12. Until now the Commission has not considered public funding of port infrastructure which is open to all users as aid. However, as ports are increasingly considered as terminals having mainly commercial activities with greater involvement of the private sector, and competition is strong on a Community-wide basis, a different approach could be desirable for the future. Therefore, the Commission finds that port infrastructure should be priced in such a way that users should bear the real costs of the port services and facilities they consume.

13. If the Union is to develop a more uniform approach to port charges in the Community, a framework should be included in a proposal for a Council directive. The framework could be based on a principle of recovering the cost of new investments, operating and external costs both to ensure that new investments are demand driven and to ensure fair competition between ports in the longer term. Attention should be given to the need for flexibility to accommodate the needs of
less developed regions and to take into account external costs in parallel with other developments in the transport sector.

14. As a first step, and in order to update the information on the financial flows from the public sector to the various types of ports in the Member States, the Commission intends to make an inventory of public finance given to the main ports with international traffic as well as charging practices in these ports. This information will be useful in the further elaboration of the charging framework when for example, evaluating the possible impact of the implementation of the framework on port tariff regimes and determining a suitable transition period.

15. In the State aid field, and taking into account the information that will be obtained from improved transparency of port financing, the Commission will continue to examine public financial support for assets used by undertakings in carrying out commercial activities in ports. The Commission considers financial support that benefits particular operators as distinct from others, as State aid in accordance with the Treaty provisions. Such an approach will contribute to improving the application of a cost recovery principle by ensuring that except for situations covered by the derogations in the Treaty, investments will be financed by port undertakings on a commercial basis and accordingly their cost passed on to users. The need to link rules on State aid to the proposed framework on port charges will be considered in the context of setting up such a framework.

16. The implementation of a Community approach to port charging and financing would furthermore have to be progressive and dovetailed with the development of a general approach to infrastructure charging and financing for all modes of transport. The Commission intends to prepare a communication on an intermodal approach to this matter in 1998 which will, on the basis of the discussion on this Green Paper, address the existing approach to public investments in infrastructure and suggest concrete steps on the development of an appropriate framework for ports.

17. Maritime infrastructure outside the port area needs particular attention. In the case of coastal aids to navigation a Community initiative should be prepared to establish the principles for charging systems, aimed at the recovery of the development and investment costs of such aids, and a mechanism to equitably share the financial burden with users. For local aids to navigation within the port area and in its immediate approach as well as for dredging of approach channels to ports, the user-pays principle will have to be examined with caution in order to take adequately into account the different geographical situations in which ports find themselves.

18. The future approach for Community support to ports should be in line with the approach taken for port investments in general. Financing under the TEN-T budget line will be concentrated within the port area on feasibility studies, EDI systems and support for combined transport. Priority will also be given to improving hinterland connections, especially rail and inland waterways. Financing from the Cohesion Fund and ERDF will be available, primarily serving such priorities as better integration of ports into the TEN-T, improved connections with the hinterland, and refurbishment inside the port area.

**Port services and market access**

19. Port services are to be seen as an integrated part of the maritime transport system as they are indispensable for the proper functioning of this mode of transport and thereby make an essential contribution to the efficient and safe use of port and maritime infrastructure. Current practices have given rise to complaints by users and potential suppliers of such services about alleged breaches of the EC Treaty, which the Commission is currently examining on a case by case basis, as well as about divergent standards on safety and service quality.

20. Complementary to the case by case approach, Community action could be envisaged in the form of developing a regulatory framework aiming at a more systematic liberalisation of the port services market in the main ports with international traffic in order to establish, over a reasonable
period of time, a level playing field between and within Community ports while ensuring compliance with port and maritime safety standards. Such a new framework would in no way prejudice the Commission’s appraisal of any complaints made in individual cases on the basis of the competition rules.

21. The objective of the liberalisation measures would be to ensure open access to the market for port services through appropriate mechanisms and requirements on the basis of transparency, non-discrimination and certain principles for charging, while determining an appropriate framework for the implementation of public service obligations, whenever they are deemed necessary, as well as of the safety requirements. As an integral part of these measures, harmonised or, at least, minimum standards for training and qualifications of the personnel and for the equipment involved should be established at EU level. This ensemble of actions would be especially relevant for the technical-nautical services in so far as they contribute to the efficient and safe use of port and maritime infrastructure.

22. However, the heterogeneous nature of these services and the diverse nature of ports (in terms of their size, function and geographical characteristics), would require a differentiated approach to the liberalisation of the various types of port services and provisions for specific situations, including the possibility to grant exemptions in certain cases where justified. Any steps towards liberalisation would need to be introduced gradually in order to allow sufficient time for the sector to adapt.

Comments are invited

23. This Green Paper is intended to launch an active discussion involving the Council of the European Union and the European Parliament, the Economic and Social Committee and the Committee of the Regions, the port authorities, operators of the port and maritime industries and associated interested parties, together with the trade unions and other organisations representing the social interests in the sector. Comments and opinions are invited on all the positions set out in this Green Paper.

24. Comments should be sent to the European Commission, DGVII D/4, Rue de la Loi 200, B-1049 Brussels to the attention of Mr Aragon Morales (fax +32 2 2953076) at the latest by 1 April 1998. Comments may also be sent by e-mail to: ports-green-paper@dg7.cec.be
1. Introduction

1. The port sector handles more than 90% of the Union’s trade with third countries and approximately 30% of intra-Community traffic, as well as more than 200 million passengers every year. There is, therefore, a clear need for a modern, efficient and competitive European port sector which contributes to the principle of sustainable mobility and which enables maritime transport to be integrated, together with the other transport modes, into the transport chain. This has to be seen in the context of the great diversity which exists in the sector in terms of structure, operation, organisation and legal framework which all show great regional differences.

2. The Treaty of Rome established the fundamental Community rules with regard to competition, State aid, the freedom to provide services and the right of establishment. Furthermore, the Maastricht Treaty has introduced the principle of subsidiarity and laid down the rules concerning the establishment of a trans-European transport network, which aims to create an integrated transport network in order to achieve the objectives of the single market and to strengthen economic and social cohesion. Finally, the future enlargement of the European Union will see the extension of the existing EU legislation, including that concerning trans-European networks, to the acceding countries.

3. Competition between and within ports is increasing due to a number of factors. The realisation of a liberalised internal market including the market in transport services, technological changes including the application of information technology and standardisation of loading units, and the development of the trans-European network are all drawing the different parts of Europe closer together and providing transport organisers and users with greater choice in an intermodal transport environment. This increased inter-changeability brings into sharper focus any factors distorting trade flows between Member States and underlines the need for a Community framework in order to ensure the principle of free and fair competition.

4. Ports are important not only as centres of regional economic and social development and as part of the maritime transport system but also as interconnection points between seaborne and land-based modes of transport. The Common Transport Policy, as set out in the Commission’s White Paper in 1992, emphasised the need to develop a more balanced transport system by promoting more environmentally friendly transport solutions such as intermodality and short sea shipping. From a maritime and ports perspective this concept was further endorsed in the Commission’s Communication on Short Sea Shipping (1995) and in the recent Communication “Shaping Europe’s Maritime Future (1996). However, while European ports are handling more goods than ever the scale of intra-European maritime traffic is not fulfilling expectations as a desired alternative to a consistently increasing road transport sector.

5. The port sector has so far not been at the centre of the European transport policy debate. The purpose of this paper is, therefore, to launch a discussion on the European port sector to identify those issues which need to be addressed at Community level with a view to the development of, where necessary, coherent policies on individual port issues which should improve the performance of the sector while supporting the economic and social needs of the Community. The main objectives of such policies should be, firstly, to help increase port efficiency and improve port and maritime infrastructure by integrating ports into the multimodal trans-European network and, secondly, to meet the Community’s responsibilities under the Treaty to ensure free and fair competition in the port sector.

1 According to figures provided by the Member States
2 The Development of Short Sea Shipping in Europe: Prospects and Challenges. COM(95)317, 05.06.95.
3 “Shaping Europe’s Maritime Future” - a Contribution to the Competitiveness of Maritime Industries. COM (96)84 of 13.03.96.
2. EU PORTS AND THE ECONOMY

2.1 In general

EU ports handle approximately 2.7 billion tons of cargo per year (1996 figures). In addition, ports provide essential connections to peripheral countries and islands and contribute to the development of the tourism industry. Turnover in EU ports, by maritime region, in 1993 was as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Deep Sea</th>
<th>Inter-Regional</th>
<th>Regional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltic Sea</td>
<td>47</td>
<td>121</td>
<td>98</td>
<td>266</td>
</tr>
<tr>
<td>North Sea</td>
<td>359</td>
<td>494</td>
<td>355</td>
<td>1209</td>
</tr>
<tr>
<td>Atlantic</td>
<td>136</td>
<td>219</td>
<td>19</td>
<td>374</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>270</td>
<td>146</td>
<td>245</td>
<td>661</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>812</strong></td>
<td><strong>980</strong></td>
<td><strong>717</strong></td>
<td><strong>2510</strong></td>
</tr>
</tbody>
</table>

Table 1. Estimated turnover in EU ports by region 1993 [million tons]^4

The main features of recent developments in these four regions are summarised in Annex I.

7. Profound trends in trade liberalisation and globalisation of the world economy are having a significant impact on international seaborne transport and ports, with long term effects difficult to predict. These trends have drastically weakened the link between manufacturing and the location of factors of production and have stimulated a noticeable shift in manufacturing activities towards countries with a comparative advantage.

8. In their turn, too, developments in international transport and communication technologies have been instrumental in shaping these processes. Containerisation and multimodal integrated transport have revolutionised trading arrangements for higher value-added goods and have given manufacturers and shippers more control and choice over the "production-transport-distribution" chain. Transport efficiency becomes even more necessary due to the nature of value-added goods which require fast transit times from origin to destination in order to increase traders’ turnover and minimise inventory costs.

9. The capital-intensity of modern shipping, as a result of the need to achieve economies of scale and to offer a more frequent service of higher quality, has led to considerable capital concentration in the industry. Carriers are forming new alliances and logistic companies, often linked to European distribution services. Such rationalisation of services requires carriers to limit their ports of call. Concentration of cargo in a limited number of ports may make it more viable for high-volume modes such as rail to be used but it could alternatively lead to an increase in the use of road transport and thus run counter to a policy of shifting freight transport from road to sea.

10. Undoubtedly, further trade liberalisation will create new and stronger trade flows and demand for shipping services. Industry observers are not yet clear as to the “type” of shipping required. On the one hand, some see a continuing increase in ship sizes. On the other hand, others point out that the trends of world-wide port development (making direct port calls^5 financial attractive), diseconomies of scale in major ports, the development of transport infrastructure in peripheral Europe and a future road pricing policy less favourable to long-distance haulage could all lead to smaller ships making direct port calls. The effect could be a more balanced traffic flow and port development in Europe.

11. Whatever the likely future scenario, one thing remains clear. Europe’s export competitiveness in a global economy increasingly depends on efficient and cost effective transport and port systems.

^4 Figures estimated on the basis of UN Commodity Trade Statistics for 1993 and port turnover data provided by the Member States.

^5 A direct port call is when a vessel goes directly to the final port of destination instead of calling at a (large) hub port first in order to reload the cargo into a smaller feeder vessel.
Furthermore, the substantial emphasis the Union attributes to the development of trans-European transport network, aiming at closer economic and social integration, creation of employment, growth, and sustainable mobility, emphasises the role ports have to play in the transport system. Indeed, the development of the Union’s multimodal network would be seriously incomplete without including interconnecting points such as ports.

12. The Commission, therefore, finds it important to promote the port sector through a number of measures and actions aimed at improving its overall performance. These include actions to improve port efficiency, remove harmful obstacles to trade and promote improvements in port and port-related infrastructure so that ports reach a high standard throughout the Community taking into account the existing regional differences.

2.2 The changing role of ports in an increasingly competitive environment

13. In Europe, as in many other parts of the world, ports have often been seen by governments as growth-poles and fulcrums of national and regional development, and ports were often used as instruments of regional planning. Many Member States have done so by steering State investment, through regional policies, towards ports and port-related infrastructure, in order to encourage national development. Over time, the major European ports have become commercial transport and service centres for international and intermodal transportation with increasing container and roll on - roll off (Ro-Ro) facilities. For these kinds of operations, the cargo handling services are now largely standardised and rationalised and therefore less labour intensive. However, these ports still create value added activities by becoming handling, service, distribution and logistics centres for all modes of transport, providing new telematic and technological solutions, less burdensome administrative procedures and becoming active commercial players in the transport chain.

14. The completion of the internal market and the existence and further development of inland transport networks across Europe has intensified competition among ports significantly, particularly competition aimed at attracting unitised transhipment cargo. The disappearing national (captive) hinterlands mean that pricing, port development and financing decisions of a particular port may have marked effects on its neighbours, nationally and internationally. This raises the question of the relevance and desirability of a more co-ordinated approach to port development at pan-European level aimed, inter alia, at ensuring that ports compete on sound commercial grounds, both for existing and new trade, and at the same time highlighting the crucial role of ports in the optimisation of trans-European transport network. However, it must be borne in mind that ports are part of the overall transport system and that investment and pricing policies in other modes of transport may seriously affect them. Therefore, a new approach to the port sector should also be seen in the broader intermodal context.

3. EU PORTS AND THE COMMON TRANSPORT POLICY

3.1 General

15. Although ports have so far not been at the centre of the development of the common transport policy, their importance to the transport system is already reflected by their inclusion in a significant number of Community policies. Past and current developments in these fields are summarised in this chapter. Subsequent chapters address in greater detail two areas of particular importance for the future development of the common transport policy: financing and charging for infrastructure and port services.

Characteristic examples of this approach can be found in the Maritime Industrial Development Areas (MIDA) of Rotterdam, Antwerp, Le Havre, Marseille and Genoa.
3.2 The role of ports in the Trans-European Transport Network

16. Articles 129 b and c of the Treaty on the European Union govern the development of the trans-European transport network (TEN-T). It requires the EU to promote the interconnection and interoperability of national networks and access to them, taking into account the need to link island, landlocked and peripheral regions of the Union with its more central areas. The aim is to enable citizens of the Union, economic operators and regional and local communities to derive full benefit from the internal market. Clearly, interconnection, interoperability and TEN-T optimisation in general cannot be achieved if ports are not included in the equation as a crucial element of an integrated European transport network.

17. In brief, the objectives of including ports in the TEN-T strategy can be summarised as:

- Increasing the efficiency of the European transport system;
- Encouraging growth of intra EU trade and trade with third countries including the Community’s nearest neighbours (EFTA, Central and Eastern Europe, Mediterranean and North Africa);
- Overcoming congestion of the main land-corridors and minimising the external costs of European transport by contributing to the development of short sea shipping;
- Improving the accessibility of peripheral regions and strengthening the economic and social cohesion within the Community by enhancing the Community’s internal maritime links, paying particular attention to island and peripheral regions.

18. The guidelines for the development of TEN-T, setting out the priorities of the EU’s transport infrastructure policy, do not include a map of ports. However, following a request from the Parliament when the guidelines were adopted, the port element is now being adapted in order to include a map of ports and revised criteria for identifying projects of common interest. The inclusion of seaports as important interconnection points is consistent with the concept of a multimodal network. Objective criteria, such as freight turnover figures, have been employed to establish the ports to be included in the map. Furthermore, it must take into account that one of the aims of EU transport policy is to promote short sea shipping and that the maritime element of the network often ensures important links to peripheral areas and islands. This would imply including ports in all parts of the Union in which projects eliminating bottlenecks can be located, while keeping in mind that including too many ports could be counterproductive to short sea shipping which requires a concentration of cargo to be feasible. It will therefore, be necessary also in the future to consider introducing additional, objective criteria for the identification of ports that could enhance the integration of ports into the multimodal chain.

19. In order to integrate ports into the multimodal network, priority needs to be given to projects of common interest which improve missing links between the ports and other modes, in particular railways and inland waterways, and to the implementation of Electronic Data Interchange (EDI) projects. The funding of such projects will be discussed in Chapter IV of this paper.

Action

The Commission considers the full integration of ports into the TEN-T desirable for the establishment of the multimodal network taking into account, in particular, the need to ensure links to the peripheral areas and to encourage short sea shipping. A proposal to adapt the present guidelines for the development of TEN-T accordingly is being presented in parallel to this Green Paper.

3.3 Connections to neighbouring third countries

20. The Treaty and the TEN-T guidelines permit co-operation with neighbouring countries in order to promote projects of mutual interest and ensure the interoperability of networks at a pan-European level. One of the aims is to connect the TEN-T with networks outside the Union, particularly with

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Central and Eastern Europe and the Mediterranean area. This has become even more important in
the light of the forthcoming enlargement of the EU in order to achieve a full integration of the
acceding countries. To facilitate this integration and prepare for accession, the Commission has
launched a process of Transport Infrastructure Needs Assessment (TINA). The port and maritime
sector is of considerable importance to the economies of a number of those countries expected to
join in the first round of accession and substantial investment will be needed in transport
operations and infrastructure (including ports) both prior to, and following, accession to promote
their convergent development with the rest of the Community.

21. Given the opportunities and initiatives for increased trade between the EU and neighbouring third
countries, it is a desirable objective to promote standards in these ports, particularly those
involved in major trade flows with the EU, which are comparable to standards found in the Union.
In general, this means continuing the process of rehabilitation and modernisation, the
implementation of basic standards concerning safety and environmental protection and, where
necessary, improving security, monitoring and registration arrangements for cargo. Community
funds from the PHARE and TACIS programmes (in the Baltic, Adriatic and Black Sea Regions)
and the MEDA programme (Mediterranean Region) could offer assistance towards the
achievement of these goals. Furthermore, Waterborne Working Transport Groups have been set
up in order to actively encourage co-operation by identifying projects of mutual interest.

Action

The future enlargement of the EU emphasises the need for extending the TEN-T to our
neighbouring countries. The Commission will continue to work with all neighbouring
third countries in the relevant fora in order to identify projects of mutual interest and to
use available funds in the most efficient manner.

3.4 Ports as transfer points in the intermodal transport chain

22. Intermodality is an essential component of the European Union’s Common Transport Policy for
sustainable mobility. Its objective is to develop a framework for an optimal integration of the
different modes and utilisation of their capacities, so as to enable an efficient use of the transport
system through seamless, customer-oriented, door-to-door services favouring innovation and
competition between transport operators.

23. Ports are crucial connecting points in intermodal transport, transferring goods and passengers
between maritime and land-based modes. Higher port efficiency thus contributes to the integration
of modes in a single system, allowing better use of rail, inland waterways and sea transport:
modes that by themselves do not always allow door-to-door delivery as is the case for road
transport.

24. One of the main requirements of intermodality, and a prime objective in the development of the
TEN-T, is that transport modes are physically linked, for example through better hinterland
connections to ports. However, successful intermodality is dependent on a number of equally
important factors that have to be identified and addressed in the future. For example, the use of
more than one transport mode results in additional transfer costs, the risk of reduced reliability
and more complex administrative procedures. The use of modern information systems is crucial in
this respect. Such systems are already in use in the larger European ports but are still important

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* The TINA process was initiated by the joint meeting of the Transport Council and the Ministers of the ten acceding countries in Central and Eastern Europe. This process, supported by funds from the PHARE Multi-Country Transport Programme, aims at defining a future TEN-T in the enlarged Union. It is based on the TEN guidelines and includes all modes of transport.
* The MEDA funding is directed towards projects in which two or more countries in the region are involved.
* The Commission is supporting the development of such a system in the framework of the 6th FP Transport R&D Programme (i.e. OSIRIS project).
missing links in other parts of the Union. The aim for future projects in the field of intermodality will be to ensure interoperability and interconnection between such systems e.g. to develop one common information system optimising communication between the port and its customers, reducing paper requirements and improving the service and management of ports. Equally important are measures such as standardisation of loading units and harmonisation of relevant regulations.

**Action**

In order to optimise the role of ports in the door-to-door transport chain proper infrastructure links to the TEN-T are vital. However, equally important are other measures such as standardisation of loading units, integration of telematics etc. The Commission will support actions to improve the port's position as intermodal transfer points including financing of research and demonstration projects in the area of management systems, and measures to foster innovation and to support the development of a competitive intermodal transport system.

### 3.5 Ports and the development of short sea shipping in Europe

25. The promotion of environmentally friendly modes of transport, in particular short sea shipping, and their effective integration in multimodal transport chains and networks is a central objective of the Union's transport policy. However, despite the increasing turnover in European ports, intra-European maritime traffic has not as yet been able to demonstrate a distinctive increase in its market share vis-à-vis that of the road transport sector. A number of factors can account for this including terminal costs and turnaround times, lack of appropriate infrastructure, institutional rigidities in ports, poor adaptability to multimodal transport systems and lack of information to shippers.

26. In its Communication on Short Sea Shipping, the Commission set out a framework of initiatives necessary to promote short sea services in Europe, stressing the need for improved port efficiency. Within the Maritime Industries Forum, created by the Commission in 1992, the panel on Short Sea Shipping has repeatedly addressed these issues and made recommendations to the Industry, the Member States and the Commission. An important issue in this respect has been the complexity of documentary and procedural requirements in ports. given that a number of cumbersome procedures and practices still exist, mostly beyond the port’s own control, that impose significant costs on commercial operators and put maritime transport at a disadvantage compared to other modes. The Commission is, therefore, currently undertaking a fact-finding study to identify requirements in ports that affect maritime trade in Europe and compare them with those prevailing in inland transport. Customs requirements and the efficiency of customs authorities in processing documentation are particularly being addressed. In this context, implementation of EDI systems is seen as an important tool to improve the flow of information between custom authorities and the other parties in the transport chain. If needed, the Commission will recommend actions aimed at the streamlining of procedures and integrate them into maritime transport and across the transport chain as a whole.

27. The Commission has put forward in July 1996 a draft Council Regulation which provides for the extension of the PACT programme. The new PACT provides for support to combined transport projects including short sea shipping. A number of projects are already being developed with PACT support in the framework of the 1997 exercise.

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12. The Commission is supporting the development of such systems in the framework of the specific Transport Programme of Community Research and Development (INTERPORT and BOPCOM) and within the framework of the Information Society (MARTRANS).

13. A new COST Action (COST 339) on technical and economic conditions for the European wide operation of small intermodal transport units (small containers), is currently under preparation. This action is aiming to develop pre-standards.

14. The Development of Short Sea Shipping in Europe: Prospects and Challenges. COM(95)317, 05.06.95.

15. COM/96/335 final of 27 July 1996.

28. Co-operation among all parties in the transport chain is necessary if short sea operators are to be effectively and competitively engaged in door-to-door transport solutions. Notwithstanding commercial considerations, co-operation among ports should be encouraged, particularly in the area of telematics, the streamlining of procedures and the exchange of know-how.

29. However, one of the most important factors that could be instrumental in boosting Short Sea Shipping in Europe is a cost recovery pricing policy in road transport that would better internalise its external costs. Such a policy, already suggested by the Commission in its Green Paper Towards a Fair and Efficient Pricing in Transport, is expected to make competition among ports and transport systems fairer and more efficient, leading to a more balanced distribution of traffic across Europe.

**Action**

The Commission will continue to see the development of short sea shipping as one of the priorities of the future transport policy. In doing so, it will consider ways to streamline procedures in ports, give priority to short sea projects in the framework of the TEN-T, continue to support actions in the framework of Research and Development and of the new PACT programme. Furthermore, the Commission intends to take the issue of pricing in the different transport modes forward with a new communication on infrastructure charging in a multimodal perspective.

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**3.6 Maritime safety and the environment**

30. Ports are the most obvious points where compliance with international or EC maritime safety regulations can best be checked and uniformly enforced. The Community’s maritime safety policy, aimed at the elimination of sub-standard shipping through the proper enforcement of international legislation, is primarily focused on ships. However, the policy has also a direct impact on ports, as it requires them to co-operate in the implementation or enforcement of the legislation and to ensure a high level of port services such as pilotage, mooring and towage that are intrinsically related to the safety of ships. Equally, the absence of uniform application of safety rules among ports can lead to distortions of competition and this is an important consideration to be taken into account when examining possible new initiatives in the field of maritime safety.

31. The Commission is currently examining the conditions for the harmonised application within the Community of various provisions of the International Maritime Organisation (IMO) in relation to cargo-handling operations. The mandatory application by ship and terminal operators of the draft IMO Code of Practice for the safe loading and unloading of bulk carriers, as well as its enforcement through port State control, would significantly enhance safety in this area. Furthermore, compliance with regulations concerning stowage and securing of cargo and safety of cargo lifting equipment, such as the Convention of the International Labour Organisation (ILO) nº 152 on occupational risks, will contribute to the safety and protection of workers involved in cargo operations.

32. In the area of environmental protection, a number of international conventions, codes and resolutions have been issued by the IMO. The Community has already started to take measures towards the convergent implementation of these international rules and legislation and port authorities will have to play an essential role. Perhaps the most relevant upcoming legislation affecting ports in this respect will be a proposal for a Directive on the use of waste reception facilities in European ports, which the Commission services are currently drafting. This proposal

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18 The uniform enforcement of international rules for all ships operating in Community waters is the purpose of Directive 95/21/EC on Port State Control (PSC). The Directive requires port authorities and pilotage services to co-operate by providing relevant information and assisting PSC inspectors in detecting and targeting sub-standard ships for priority inspections.
19 Occupational Safety and Health (Dockwork) Convention (1979).
20 Legislation has already been adopted for (i) notification requirements for ships carrying dangerous or polluting goods, and (ii) promotion of environmentally friendly oil tankers (SF1 Regulation).
springs from the recognition that operational discharges from ships are at an unacceptable level in spite of the obligations under the MARPOL convention. The draft Directive is being designed to enhance the present availability and adequacy of reception facilities in EU ports and to secure their use by ships. The prevention of operational or intentional oil spills at sea should furthermore be enhanced by the elaboration of wide-scale monitoring programmes, and measures such as training and more efficient legal interventions.

33. Infrastructure projects can have a negative impact on the environment and have always to be considered in the context of environmental legislation and through appropriate environmental impact assessment. Ports are often in proximity to populated areas, or areas where particular attention must be given to protected or endangered habitats and species. As a result, port development is often confronted with special circumstances and constraints. Community legislation is already in place to address this problem and promote environmentally friendly solutions, such as the Directive on environmental impact assessment and the Wild Birds and Habitats Directive.

34. In addition, new port developments should also be considered in the light of an integrated framework for coastal planning taking into account the socio-economic and environmental needs and constraints of the surrounding coastal area. The proposed Council Directive on the assessment of the effects of certain plans and programmes on the environment, which has been adopted by the Commission, could play an important role in this regard. Strategic environmental assessment of transport development plans will improve the consideration of alternatives and the involvement of the various authorities and the public in the planning process. Furthermore, with assistance from the Commission, the European Seaports Organisation (ESPO) has published a Code of Conduct providing a quality framework for a programming action with respect to the protection of the environment within port areas.

35. New technology and more efficient operations should be seen as better options through making the best use of existing facilities instead of providing new ones. In areas with a large number of ports, better co-ordination and specialisation among them could also reduce the demand for new port development. Finally, demand driven decisions can also help in this direction, as they will reduce the risk of over capacity and foster efficiency in ports. Where new developments are needed environmental regulations must be properly and consistently applied.

**Action**

The Commission will continue its efforts to ensure effective and uniform enforcement of compliance with international legislation rules by all ships entering EU ports and the harmonised application within the Community of IMO and ILO provisions related to the ship/port interface, such as cargo-handling, techno-nautical services and protection of workers involved in cargo operations. Furthermore, the Commission finds it important to ensure environmentally friendly solutions in the port sector and at sea, such as enhancing the present availability and adequacy of reception facilities in all EU ports. In order to improve the integration of environmental considerations in the planning of port development, the Commission will continue to promote the development of integrated coastal planning and management, including strategic environmental assessment. The Commission will continue its work in fostering new technology in order to make port operations as efficient as possible and to ensure a better use of existing facilities.

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3.7 Research and development

A substantial part of the currently ongoing specific R&D programme on transport is dedicated to ports-related research including those already mentioned favouring intermodality and short sea shipping. These actions include public/private-financed R&D projects developing information and communication, cargo tracking and tracing and AEI systems; analyses of the administrative, information and organisational framework of ports; and accordingly developing decision support tools for (re-) organisation, resource planning and management of ports and their role as transfer points in the intermodal transport chain. They address also environmental issues such as the application of MARPOL rules in ports, efficient dredging and the relations between ports and their urban environment. Complementary research on new transhipment technologies is currently addressed by the Industrial and Materials Technologies (IMT) Programme.

New technologies such as Geographic Information Systems, and in particular Electronic Chart Display and Information Systems (ECDIS), are currently being assessed and integrated to support traffic management in port areas and therefore improve efficiency and safety of navigation. The development of a Cargo Black Box (CBB) will contribute to the facilitation of customs procedures in ports and should therefore provide, in the future, a remedial tool for one of the major obstacles to a more widespread use of short sea shipping. Newly developed methodologies such as Formal Safety and Environmental Assessment (FSEA) will also provide indexes to assess quality, safety and environmental measures. Among the environmental initiatives are the Commission’s demonstration programme on integrated coastal management. The aim of this programme is, amongst others, to improve the co-operation between authorities and individuals involved in coastal development.

The Commission will continue to support maritime and port projects under the present and future R&D programmes. The Commission has included in its proposal for the 5th Framework Programme on Research and Development two key actions which are relevant to port related research: “Sustainable Mobility” and “Marine Technology”. The aim will be to improve the operability, reliability, economic performance and environmental compatibility of ports and to develop ports as part of the intermodal transport chain. For example a major challenge will be the integration of commercial and safety-related information. Future R&D should also provide tools to allow policy makers to assess different policy scenarios, including those needed to follow up this Green Paper.

4. FINANCING AND CHARGING FOR PORTS AND MARITIME INFRASTRUCTURE

4.1 Diversity of national approaches and current trends

The financing of ports and maritime infrastructure in Europe and policies on charging their users vary considerably, reflecting the considerable differences in the way in which their ownership and organisation has been approached. Ports may be owned by the State, regional or local governments or by private enterprises. Their management are often dependent on public authorities and subject to different degrees of regulation and supervision. In the past, ports tended to be seen mainly as trade facilitators and growth poles for regional and national development providing services of general economic interest by the public sector and which principally were to

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24 Actions to promote SSS is already being undertaken within the 4th Framework Programme on R&D through the Concerted Action on Short Sea Shipping.
25 Automatic equipment identification
26 In addition to the transport R&D programme there are currently two COST Actions addressing port issues, namely COST 330 as mentioned before and COST 326 on Electronic Chart Display and Information Systems.
27 COM(97) 142
be paid for by the taxpayer. Whereas now the trend has increasingly moved towards considering ports as commercial entities which ought to recover their costs entirely from port users who benefit from them directly. At the same time, certain port and maritime infrastructure such as, breakwaters and certain navigation aids, have in the great majority of Member States been traditionally regarded as public goods, while a number of port services (mainly the nautical-technical ones described below) also carry public service obligations due to their relationship to port safety and the protection of the environment.

39. Despite the wide variety of approaches to financing port facilities and services, however, there is a discernible current trend towards greater private participation in port activities, particularly those of a predominantly commercial nature such as cargo handling. As a result, financing of port facilities for such purposes is increasingly becoming the responsibility of the private sector, while the port authorities tend to restrict themselves more and more to their "landlord" role and the financing and operation of those facilities which are essential to the safe and efficient operation of the port as a whole. At the same time, there are indications that in future some ports may seek to develop a more active commercial role, in co-operation with private partners inside and outside the port, to provide a door-to-door service to customers.

40. The trend towards greater private sector participation in ports can be explained by both current economic considerations and by a noticeable shift in attitude regarding the function and role of ports. Firstly, the need for projects to be economically or even financially viable is seen as a necessary discipline in circumstances where resources for infrastructure development have proved to be scarce and when the involvement of the private sector, either on its own or in the form of public/private partnerships, is accepted as a growing and desirable development. Second, the fact that ports are used mostly for commercial ends, the often narrow range of users they serve and the typically private organisational structures they adopt, differentiates them from the pure public goods to which they had often been compared. Thus, the port industry is increasingly viewed as moving from a situation where predominantly public capital was used to provide common user facilities, to one where capital from different sources is being used to provide terminals which serve the logistical requirements of more narrowly defined groups of commercial users. In such a way, the "general economic interest" argument loses weight, leading to a more commercial attitude towards pricing and infrastructure funding.

4.2 EU approach to date

41. At the level of the EU, financing and charging for port and maritime infrastructure has been approached with some caution, given the variety of approaches at national level.

42. As regards State aid policy, the Commission has taken the view that public investment in port infrastructure which is accessible to all users on a non-discriminatory basis is not to be considered as State aid within the meaning of Article 92 of the EC Treaty. Such investments have thus been considered as general measures, being expenditures incurred by the State in the framework of its responsibilities for planning and developing a transport system in the interests of the general public. The same applies to navigation aids and other maritime infrastructure of benefit to the whole maritime community. On the other hand, where particular investments favour certain operators rather than others, they are considered to be aid but may benefit from the exemptions provided for in the Treaty, for example, in the case of regional development projects which are exempted under Article 92 (3) (c).

28 In the sense that (i) no particular user can be excluded from their use if he/she is not prepared to share in the costs of their production; (ii) the consumption of user A does not affect the consumption of user B; and (iii) the cost of their production does not vary with consumption.

29 As has been stressed in the final report of the High Level Group on Public-Private Partnership Financing of trans-European Transport Network Projects (VII/321/97) and followed up with a communication of the Commission COM(97) 453 final.

30 Open use of the port infrastructure is usually considered to imply that access should be open to (i) all users of the facility, i.e. shippers, vessels and (ii) any operator that is interested in operating the facility; for example by selecting the operator through an open tendering procedure.
43. An essential condition for the effective and fair application of the State aid provisions outlined above is financial transparency of port accounts. Such accounts should identify the financial flows from the public authorities to the port sector and allow meaningful comparisons across ports to be made. Currently, however, due to the complexity of the institutional and financial regimes for ports and maritime infrastructure in Europe, the financial relationships between the public sector, the ports and other undertakings operating within them are often not clear.

44. The Commission Directive 80/723\(^\text{31}\) on the transparency of financial relations between Member States and public undertakings applies to public ports whose annual turnover exceeds 40 MECU during the two financial years preceding that in which public funds are made available. However, irrespective of the turnover, the Commission requests information from the Member States whenever it suspects that State aid may have been granted to certain ports, for example, following complaints. According to existing case-law in this area, the Member States are obliged to provide information at the request of the Commission also in situations where economic activities of an industrial or commercial nature are integrated into the State administration.

45. The Commission is currently examining possible amendments to the transparency Directive in order to be able to request information about financial flows within undertakings with a view to verifying possible cross subsidisation. The obligation to keep separate accounts for different activities would apply to all those undertakings, public or private, irrespective of their turnover, which on the one hand operate in reserved sectors for which they receive compensation (exclusive rights or subsidies) for public service obligations and on the other, operate in non-reserved sectors in competition with other enterprises.

46. As regards policy on the Trans-European Transport network (TEN-T), the approach has been to assist port and port-related actions of common interest only with feasibility studies, thus recognising that there can be strong competition for trade between ports and that care should therefore be taken not to distort those relationships. Accordingly, port and port-related projects of common interest can, at present, be located in any Community port. The projects can be located in the port area or they can provide the port with better maritime/river access or link it to the TEN land network. Emphasis is placed on projects which improve port efficiency and eliminate bottlenecks. The Commission considers the projects against a set of objective criteria, including a criterion relating to potential economic viability, and also against background information about maritime transport and port systems in the Union. No attempt has been made to impose a centrally determined system of port development nor in general to play a leading role in providing new port capacity.

47. At the same time, in eligible regions, the Cohesion Fund and ERDF have been used to support new and improved facilities necessary for economic development and the fulfilment of public service obligations such as the provision of accessibility to peripheral areas, while taking into account the framework established by the TEN-T guidelines\(^\text{31}\). All Cohesion Fund countries and many areas covered by the ERDF are on the periphery of the EU, having substantial coastlines and often many islands. A well-integrated maritime sector will accordingly contribute to the development of the single market and to a more balanced economic development, as envisaged in the Treaty.

48. However, ports in these regions have to be adequately prepared to take on the challenge. Many ports concerned are characterised by lower levels of efficiency. Improvements are necessary to ensure that existing and future facilities are used as effectively as possible, to enable ports to take their share of the increased traffic in the single market and to allow them to play their proper part in a more balanced distribution of traffic. It should also be kept in mind that the lack of facilities at

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one end of the maritime chain can eventually damage the efficiency and image of maritime transport as a whole. The aim is thus to bring ports at both "ends" up to the highest possible standards in order to benefit the overall port system.

49. As regards charging policies, the EU has not so far intervened, leaving these to be decided at national, regional or local level except in so far as they may be relevant in assessing public interventions as State aids.

4.3 Search for new direction

50. In recent years, however, trends in port organisation and financing have led to calls for a new direction in EU policy.

51. A study on European seaports ordered by the European Parliament in 1993\(^2\), while acknowledging that there are different financing arrangements in individual ports which need to be respected, concluded that there is no fundamental difference between investments in port infrastructure and other capital intensive investments in industrial complexes. Therefore, there is no reason for adopting a completely different approach to port investments, and consequently no justification as to why the direct users should not bear the costs of such investments. The study suggested that the introduction of market principles in infrastructure works, except for those related to maritime access and defence, would be the most effective remedy to avoid the risk of creating wasteful overcapacity\(^3\) and possible distortions of trade flows between Member States.

52. Indeed, the liberalisation of transport markets and the development of the TEN-T has resulted in intensified competition between ports\(^4\). For example, the development of the Trans-European Rail Freight Freeways connecting both Northern and Southern ports with central industrial areas will draw Europe closer together and further intensify competition between ports in different regions, in particular, in the field of container traffic where considerable growth rates have been seen in the last 5 years (see Annex II maps 1-5). The increasingly competitive situation is calling into question the EU's policy on ports as it has developed to date.

53. The same applies to the trend for an increasing number of ports to recover at least some infrastructure investments costs through related port charges. Fundamental considerations of fair competition and economic efficiency suggest that in this context as in others, transport users should as a matter of principle be paying the cost of the infrastructure which they exploit.\(^5\) Moreover, mobilisation of private capital to finance sensible investments will not be attractive if public funds can be used elsewhere to finance competing developments with little or no guarantee of an adequate return. A sound allocation of resources in the port sector as a whole will depend on investment decisions being taken within a coherent framework for ensuring that costs are passed on to port users.

54. In developing this framework, however, a number of factors must be kept in mind which will affect the manner in which the user-pays principle is applied at Community level. First, as indicated above, port organisation varies considerably both within and even within Member States. Some of these forms of organisation are complex and deeply rooted in the history of port development. There is a need for analysis of these different situations as a pre-condition to successfully designing a framework which respects, to the greatest extent possible, different

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\(^{3}\) Another recent study includes figures which indicate that in 6 main ports in the le Havre - Hamburg range substantial capacity additions for container facilities are foreseen, with an overall increase of some 43 % anticipated for the next 6 years i.e. 6 % annual increase. Depending on the scenario for the future traffic demand the excess capacity by 2000 would range between 20% and 40%. The European container market: prospects to 2008, Ocean Shipping Consultants, 1997, and further elaboration done by the Commission.

\(^{4}\) Although the overall transit costs through ports may not constitute a high proportion in the case of deep sea transport of the total door to door costs (5-10%) in the case of short sea shipping such port costs constitute between 30-60% of the total costs and influence therefore the choice of port and can distort trade flows.

long established traditions. Second, a number of European ports are located in less developed and peripheral areas or on islands. Often, these ports represent the only link to the rest of the Union and constitute the centre of significant economic activity in their region. They are therefore important parameters in the Union’s cohesion policies which will need to be respected if the cost-based charging principle is to be given a more systematic application. Finally, the interdependence of transport modes and related infrastructure, some of them falling under different legal and financial regimes, necessitates not only a consistent step-by-step approach to the financing and pricing of port infrastructure, starting from investments within the port, but also coherence with developments concerning the pricing of other transport infrastructure as well as the provision of ample time for ports to adjust. Special attention has to be given to the Community’s policy on combined transport.

4.4 Towards a Community framework on port financing and charging

55. If the Union is to develop a more uniform approach to ensuring that the costs of ports and maritime infrastructure are charged to the users it will require to proceed in stages in a number of fields: charging practices and systems including transparency of port financing and development of State aid rules. Any new approach will have to be co-ordinated with the TEN-T and other financial support for infrastructure development.

4.5 A framework for port charging

56. Traditionally a distinction is made at management and administrative levels between the services and facilities inside the port and infrastructure outside the port area (hinterland connections and maritime access).

Within the port

57. The current diverse arrangements for port financing and charging involve growing distortions of competition. Subsidies can allow ports and operators to reduce prices and divert business. The State aid regime permits certain situations to be addressed but according to the existing Commission approach public financing of infrastructure represents a general measure of economic policy which cannot be controlled by the Commission under the Treaty rules on State Aid as long as the use of the infrastructure is open to all potential users in a non-discriminatory way. Reconsidering this approach for ports would obviously have an impact on infrastructure financing in general. This issue will, however, be looked at in the communication on infrastructure charging that the Commission will prepare in 1998. In order to address the distortion of competition, the Commission will examine the possibility of developing a framework for port charging. This is the approach explored in this Green paper and developed below.

58. A Community framework on port charges would require charges to be linked with costs and contain guidelines on the extent to which port charges should reflect the cost of infrastructure investments. It would form the subject matter of a Council directive establishing an appropriate framework whilst leaving sufficient scope for divergent traditions in port organisation. This could take the form of minimum requirements on charging principles that would have to be met throughout the Community.

59. Port charging systems in the Community differ considerably between European ports. They nevertheless include certain basic elements such as a description of the port facility and services covered by each type of port charge, the basis of the individual charges and the method of calculation. In general, three types of payment can be distinguished in the ports — those related to the provision of services and facilities to enable a ship to enter safely and use the port; payments for specific services or supplies rendered; and rents or charges for the use of land or equipment owned by the port. Depending on the individual port, these charges reflect to varying degrees the use of services and facilities both of which should be addressed in a future charging framework.

As regards the former, the future framework could lay down certain general principles for a charging system for port services with a view to ensuring that the prices charged reflect the cost of the services provided (see also chapter 5).

60. As for infrastructure different charging approaches are possible: 1) Average cost pricing, which would guarantee full cost recovery; 2) charging for operating costs only; and 3) marginal cost pricing (those methods are developed further in Annex III). Ports in some Member States are already reflecting, to varying degrees, infrastructure costs in port charges, the extreme being in certain countries where ports are privately owned and/or operated as commercial entities and recover all new investments and maintenance costs of infrastructure fully from users.

61. The long term objective of an infrastructure pricing policy should, in principle, be to charge for marginal social costs which cover capital, operating and external costs of infrastructure use. This policy would ensure that port customers are faced with all costs that their transport decisions imply for society as a whole. The approach would maximise economic welfare and promote economic efficiency as long as this principle also applies to other related markets. Provided that investments decisions are made on a rational economic basis such an approach would, over time, lead to a high degree of cost recovery. The application of this principle to the port sector would ensure that investments are demand driven because only investments for which there is market demand can be recouped financially. If the principle is applied systematically across Europe it would make a significant contribution to ensuring fair competition in the port sector.

62. The alternative of imposing the principle of average cost pricing (full infrastructure cost recovery) would, in the current situation, be characterised by overcapacity in some regions, lead to strong increases in port charges as past investments in ports would also have to be fully recovered. More importantly, it would lead to significant inefficiencies since there is no economic rationale for requiring current users to pay for sunk costs.

63. At the other extreme, requiring charges to be aligned with operating costs only would not come close to providing users with meaningful signals regarding the costs that their transport decisions imply. In particular, this approach would not cover the costs of new investments. As a result pricing would be inefficient, the port sector would continue to incur large financial deficits, fair competition between EU ports would not be ensured and the problem of creating new overcapacity not addressed.

64. The Commission, therefore, considers that port charges could be set in line with marginal costs, which would also take into account new investments. Clearly, operational definitions and measurement issues will have to be addressed and care will have to be taken that the charging guidelines can be easily implemented in practice (see Annex III).

65. The charging framework would, in principle, apply to ports with international traffic. The question arises whether the application of this principle would have a different impact on smaller ports in need of expansion compared to large ports in which significant capacity expansion has already occurred. Insofar as ports in economically less developed and peripheral areas are lagging behind in terms of port facilities, this issue is also clearly relevant to the impact on cohesion of the proposal.

66. The relative impact depends on the way in which the charging principle is implemented, the extent of overcapacity in different ports, the costs of capacity expansion in individual ports and a variety of other factors. There is no reason to believe, however, that, as a general rule, smaller ports will be disadvantaged compared to large ports by the application of the proposed charging principle.

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69 This relates to the environment, congestion and accidents costs which are generally described as externalities since they are external to those who cause them, and therefore not part of the prices paid by transport users.
67. However, in order to ensure that the proposed approach does not conflict with the objective of fostering cohesion in the Union, further analysis is required as to whether special rules should apply to ports in Objective 1, cohesion and peripheral regions (for example, allowing port charges in these regions to be set at a certain % of marginal costs), while at the same time ensuring that such flexibility does not breach the competition rules.

68. A charging framework would also be based on transparency of the systems applied by different ports in order to ensure fair competition between and within ports and at the same time enable the users to check whether they are receiving the facilities and services they are being charged for.

69. In addition, as already indicated, the Commission has so far treated public financing of infrastructure as a general measure of economic policy falling outside the rules on State aid as long as the use of the infrastructure is open to all potential users in a non-discriminatory way. The existing Commission approach to public investments in infrastructure, including port infrastructure, will be examined in the context of a wider policy in a communication on infrastructure charging for all modes of transport that the Commission will prepare in 1998.

Action

Accordingly as a first step, and in order to update the information on the financial flows from the public sector to the various types of ports in the Member States, notably the amounts and form of financing involved, the Commission intends to make an inventory of public finance given to main ports with international traffic as well as charging practices in these ports. This information will be a useful input in the further elaboration of the charging framework when, for example, evaluating the possible impact of the implementation of the framework on port tariff regimes and determining a suitable transition period.

If the Union is to develop a more uniform approach to port charges, a framework should then be included in a proposal for a Council directive. The framework could be based on a principle of recovering the cost of new investments, operating and external costs both to ensure that new investments are demand driven and to ensure fair competition between ports in the longer term. Attention will also be given to the need for flexibility to accommodate the needs of less developed regions and to take into account external costs in parallel with other developments in the transport sector.

The implementation of a Community approach to port charging and financing would, furthermore, have to be progressive and dovetail with the development of a general approach to infrastructure charging and financing for all modes of transport. The Commission intends to prepare a communication on an intermodal approach to this matter in 1998 which will, on the basis of the discussion on this Green Paper, address the existing approach to public investment in infrastructure and suggest concrete steps on the development of an appropriate framework for ports.

In the State aid field, and taking into account the information that will be obtained from improved transparency of port financing, the Commission will continue to examine public financial support for assets used by undertakings in carrying out commercial activities in ports. The Commission considers financial support that benefits particular operators as distinct from others, as State aid in accordance with the Treaty provisions. Such an approach will contribute to improving the application of a cost recovery principle by ensuring that except for situations covered by the derogations in the Treaty, investments will be financed by port undertakings on a commercial basis and accordingly their cost passed on to users. The need to link rules on State aid to the proposed framework on port charges will be considered in the context of setting up such a framework.
Outside the port

70. Inter-port competition is also affected by hinterland and maritime access to the port and pricing policies in land transport modes. A users-pay policy for all modes of transport, as suggested by the Commission, could affect the distribution of cargo flows among European ports. Clearly, the elaboration of a general infrastructure charging framework for all modes of transport is necessary to ensure a balanced development of pricing policies across the different modes of transport. The above mentioned Communication on an intermodal approach will also elaborate how the charging principles for port infrastructure could be integrated in a more global approach.

71. The implications of the cost recovery principle for two specific types of infrastructure, maritime access to ports and navigational aids, deserves special attention and is examined in the following paragraphs.

Maritime access

72. A number of European ports, mainly those of the North Sea, are located on river estuaries or are river ports subject to chronic silting. The provision of adequate maritime access in these ports requires substantial yearly outlays for dredging, which are at present in most cases publicly funded. Although there is no a priori reason why maritime access should be treated any differently from other port infrastructure, the unqualified and abrupt application of the user-pays principle in this case would gravely disadvantage a number of ports, some of which are important gateways to European trade, and could have a negative impact on the inland waterway traffic. The desirability of applying the cost recovery principle to approach channels will therefore need to be approached with caution. Other possibilities for achieving convergence in applying the cost recovery principle are likely to prove more urgent and easier to achieve.

Navigational Aids

73. Aids to navigation have traditionally been used in economic theory as the most characteristic examples of a public good. Apart from the typical lighthouses, buoys, etc., modern navigational aids in busy seaways and along dangerous or environmentally sensitive coasts include the development of radio-navigation systems (e.g., LORAN-C, GNSS), the physical infrastructure needed to support VTS or VTMIS, and systems of mandatory ship-routing and ship-reporting.

74. In several contexts, the safety or commercial interests of both local and transiting traffic are better served by systems which transcend national boundaries and could be developed on a regional basis. Moreover the importance of several European seaways to world trade and the increasing sophistication and capital intensity of such systems make it unfair to leave the expense of their implementation solely to individual coastal states concerned, since all transiting traffic and regional users (e.g., fishing vessels) stand to benefit. The risk of doing so is that necessary aids may not be provided or that States providing them may try to recover costs in a non-optimal way. Moreover, coastal aids to navigation benefit a traffic which, for cost recovery purposes, is “captive” only if systems are organised on a large regional basis. A Community initiative could provide the means to achieve such mechanisms. Indeed the need for the development of a Commission proposal laying down both the principles for charging systems, aimed at the recovery of the development and investment costs of such aids, and a mechanism to equitably...
share the financial burden with users, was already identified in the Commission Communication "A Common Policy on Safe Seas"\textsuperscript{14} (points 101 to 114).

75. As far as local aids to navigation are concerned, particularly those associated with the approaches to ports, the principal beneficiaries are local port users. The development and implementation of navigational aids in port areas is therefore closely related to investments in or near the port and should normally be treated in the same way. Costs should therefore, as a matter of principle, be recovered through port dues in a similar way throughout the Community. However, it may prove necessary in this context too to consider specific derogations for ports with long approaches not covered by a coastal cost recovery system of the kind mentioned above.

76. In all these cases, any proposals will be consistent with the broader framework set by the trans-European positioning and navigation network, which is the subject of a forthcoming communication.

| Action | Maritime infrastructure outside the port area needs particular attention. In the case of coastal aids to navigation a Community initiative should be prepared to establish the principles for charging systems, aimed at the recovery of the development and investment costs of such aids, and a mechanism to equitably share the financial burden with users. For local aids to navigation within the port area and in its immediate approach as well as for dredging of approach channels to ports, the user-pays principle will have to be examined with caution in order to take adequately into account the different geographical situations in which ports find themselves. |

4.6 The TEN-T and EU financial support for infrastructure development

77. The future approach on the TEN-T, should be in line with the approach taken for port investments in general. The TEN-T budget line\textsuperscript{15} should assist ports as vital transfer points in Europe’s multimodal transport system, while recognising the potential distortive impact of public subsidies. The Commission, therefore, considers that the TEN-T budget line should, as a general rule, not be used for financing projects in the port area, except for the implementation of EDI systems and infrastructure projects concerning rail, inland waterway and short sea shipping for combined transport. Priority should also be given to hinterland projects linking the ports with the rest of the network especially with rail and inland waterway connections.

78. In eligible regions the use of Cohesion Funds and ERDF, particularly in Objective 1 areas, for financing infrastructure investment in ports should continue to be possible. These funds should serve such priorities as: better integration of ports into the TEN-T; improving access to the hinterland; and refurbishing the infrastructure inside the port area. A balance will have to be struck between regional policy objectives and the need to avoid undue distortion of competition between ports.

| Action | Financing under the TEN-T budget line will be concentrated within the port area on feasibility studies, EDI systems and support for combined transport. Priority will also be given to improving hinterland connections, especially rail and inland waterways. Financing from the Cohesion Funds and ERDF will be available, primarily serving such priorities as better integration of ports into the TEN-T improved connections with the hinterland and refurbishment inside the port area. Environmental criteria will be an integral part of the conditions for Community funding to port projects. |

\textsuperscript{14} COM(93) 66 final 24.2.1993.

\textsuperscript{15} General Rules for the granting of Community Financial Assistance in the field of Trans-European Networks (Regulation No 2236/95 of 18 September 1995).
5. PORT SERVICES: ORGANISATION AND MARKET ACCESS

5.1 General

79. Having as their main function the transfer of passengers and cargo from sea to land transport and vice versa, ports provide a miscellany of services and facilities, often distinguished between those pertaining to the ship (such as pilotage, towage and mooring) and those related to cargo (mainly cargo-handling and storage). In addition, a number of ancillary services are also provided by the port, such as fire-fighting, bunkering, water supply and waste reception facilities. Depending on the organisation, legal status and objectives of a port, port services can be provided either as a comprehensive package or separately and on a mandatory or voluntary basis.

80. Port services have usually functioned in isolated frameworks protected by exclusive rights and/or legal or de facto monopolies of public or private nature. This traditional organisation of port services, mainly those related to the cargo, has, however, been widely contested during the last decade as not corresponding to new technological requirements and increasing competition. As a result, restrictions have been gradually removed from the market of cargo-handling services, which has become more commercially oriented with increasing participation of the private sector, whereas restrictions often still prevail in the market for services relating to the ship (technical-nautical services).

5.2 Services related to the cargo

81. Among all port services, cargo-handling has been the one most profoundly affected by technological development and intensified inter-port competition, the latter mainly as a result of the completion of the internal market. The new tendencies in the market can be characterised by capital concentration, specialisation and vertical integration.

82. The organisation of cargo-handling services is widely dependent on the structure of the port and the regulatory framework for employment. The continuing trend is to shift the provision of these services from the public to the private sector in order to increase efficiency, make use of the know-how of the private sector and reduce public expenditure on port labour costs. To this end, legislative reforms have taken place recently in a number of Member States aiming at adjusting the port labour market to technological and structural changes, while at the same time taking into account the associated social implications. Restructuring will enable ports to take advantage of their critical position in intermodal transport and to exploit opportunities for job creation in services, such as stuffing and stripping of containers, physical distribution, storage and packaging. The development of new services will require the use of advanced technologies and the application of data highway networks. To cope with ever growing qualification demands of workers, together with the increasing need for flexibility, awareness of environmental and maritime safety aspects, adapted training concepts need to be developed further in a life long learning process.

83. Nevertheless port labour rigidities remain characteristic of the sector, mainly related to the registration of port workers and the existence of labour pools in a number of EU ports. They have their origin in the past, at times when port work was highly irregular, in order to cope with the "peaks", mainly due to the unpredictable pattern of ship arrivals. Nowadays, pools constitute the bridge between the former labour-oriented type of port organisation, based on casual employment, and the present capital-intensive one where direct and long-term employment relationships with the operator becomes the rule. In any case, they imply participation and financing on the part of all operators in the port in which they are established.

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86 Containerisation and the capital-intensive nature of shipping have increased pressures on ports for further improvements in labor productivity and operational efficiency. In its efforts to adjust to the new demand requirements, the port industry itself has also been progressively transformed into a capital-intensive one, requiring massive investments in sophisticated cargo handling equipment and commensurate reductions in direct port employment.
84. Independently from the existence of labour pools, a priority of employment for registered port workers still prevails in some Member States, as recommended in the ILO Dock Work Convention 137 of 1973. Generally, restrictions or conditions for registration do not pose problems as long as they are non-discriminatory, necessary and proportional. An obligation for port operators to participate in the pools and/or use exclusively workers who are members of the pool for their port operations may, however, under certain circumstances constitute a de-facto restriction to market access.

5.3 Services related to the ship

85. Generally, the need to ensure the safety of vessels, cargo, passengers and the port community as a whole has led to considerable public involvement in order to guarantee the competence of the personnel responsible. The organisation of the technical-nautical services, particularly pilotage, is thus often modelled around the "public service" approach, with dues determined or controlled by the competent national administration.

86. Pilotage is a characteristic example of a mandatory technical-nautical service, organised on a monopoly basis in the majority of European ports. Access to the ports is subject to mandatory pilotage for vessels exceeding a certain tonnage or length and for vessels carrying dangerous goods. Exemption certificates for frequently calling masters and vessels (usually ferries) may be issued, albeit on the basis of complex and diversified rules.

87. The degree of public sector involvement in the provision of the service varies widely across Europe. In some Member States, the service is entrusted to national or port authorities and pilots are, in this case, civil servants. In other Member States, pilots are self-employed in partnership associations or collectives, which can be financially or operationally autonomous. Even in this case, however, public sector involvement still remains strong in relation to licensing, training, tariffs and quality standards. The regulatory framework that governs the provision of the service affords pilot associations de jure exclusive rights, usually limited to a single port and often associated with public service obligations, and it limits pilot liability in case of accident.

88. Although the information at the disposal of the Commission concerning the services of towage and mooring is more fragmented and limited, a significant diversity of organisational structures seems to exist in Europe. Here too, the services are provided either by the public or private sector, on a voluntary or mandatory basis, on an exclusive basis or in competition with other operators.

89. In the case of towage, public sector provision may involve the port authority or licensed operators under exclusive rights where rates are fixed and controlled by the competent port authority. Where the service is provided by private operators, no formal restrictions to market access exist and public sector involvement is generally limited to ensuring compliance with safety and environmental standards. Rates are, in principle, freely negotiated.

90. The service of mooring is provided directly by port authorities, by licensed companies or co-operatives operating under exclusive rights, or by a number of private companies. In certain cases, licensed operators are charged legally or contractually with public service obligations, ensuring their participation in emergency situations. The licensing system implies also the involvement of port authorities, and eventually of professional organisations, in the fixing of rates.

5.4 Port services under the rules of the EC Treaty

91. According to the principle of neutrality, guaranteed by Art. 222 of the EC Treaty, the Community must remain neutral with regard to the private or public status of port operators. Moreover, the right of Member States to define the regimes of the services provided in their ports according to their particular geographical, administrative, social, technical and historical circumstances should be respected. However, the rules of the EC Treaty, also apply, in principle, to port undertakings and authorities. Irrespective of the regime, public and private port undertakings should compete
under equal conditions, as regards port services of a commercial nature. When port authorities themselves, as public undertakings, provide port services of a commercial nature, like cargo-handling in competition with other operators, which they are indeed free to do, separate accounts should be kept for these activities. The proposal to amend the Transparency Directive will make this requirement explicit (see paragraph 45).

92. The European Court of Justice and the European Commission have adopted a number of decisions in relation to ports, particularly in the field of competition. Concerning the application of the competition rules to port services, the Court of Justice condemned in one judgement a regime of stevedoring services, which was based on the dual monopoly of port operators and dock work companies, as an abuse of a dominant position. Subsequently, the discriminatory tariffs charged by pilot corporations in a port were held to be incompatible with EC competition rules. In addition, the Commission has also adopted decisions applying competition rules to the port sector, inter alia, condemning port undertakings, acting both as port authorities and shipping companies, (mostly ferry operators), for having refused their competitors access to essential port facilities.

93. This legal tendency towards the more systematic application of Treaty rules in the port sector is consistent with the European Union's policy to encourage modernisation and efficiency, taking into account structural developments in world-wide competition and the need of companies to seek out better quality at reasonable prices. This becomes even more important when users in practice may have limited possibilities to choose among ports.

94. In addition to the competition rules, the functioning of port services regimes have to be in conformity with the major freedoms guaranteed by the EC Treaty (freedom of establishment, free movement of workers, goods and services). The Commission must nevertheless take into account safety requirements and public service obligations aimed at ensuring the continuity of the service on a non-discriminatory basis and overcoming of emergency situations. The above considerations may constitute legitimate grounds for restrictions in the access to the market for the provision of the technical-nautical services. The size of the port, or the optimal organisation of some services, notably the technical-nautical ones, may be among those factors determining the scope for market access.

95. However, no restriction can be unconditionally justified. The established conditions regarding the nature of the restriction and the evaluation of the service as one of "general economic interest" have to be fulfilled. In this context, the Commission will assess, following the principle of proportionality, whether the same objectives could not be achieved by less restrictive practices or even without restrictions at all. The challenge, therefore, is to combine safety imperatives as well as public service obligations with a structure compatible with competitive patterns. This is particularly relevant in cases where a single undertaking is operating both services falling under the scope of Article 90 of the EC Treaty and ones of purely commercial nature.

96. In cases where the interplay of market forces is still limited, attention has to be focused on the tariffs applied in order to ensure that prices are fair, transparent and reflect the costs incurred in the provision of the service. A lack of correlation between applied tariffs and rendered services

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27 Only the economic activities in the port, and not the public/administrative ones, are capable of falling within the scope of the competition rules. The Court has recently held in the "Cali case" (CJEC 13/5/97, aff. C-344/95, Diego Cali & Figli Srl Servizi ecologici porto di Genova SpA (NPESGI), unpublished), that article 86 of the Treaty does not apply to the legal monopoly of anti-pollution control on the grounds that this activity is inherent to the essential prerogatives of the State responsible for the protection of the marine environment.


30 i.e. Decision 21/12/93, Port of Rodby, 94/119/FEC, OHCI I, 35/52, 26-2-94; Decision 21/12/93, IV, 34, 689, Sea Containers: Sealink, OHCI I, 15-8, 18-1-94. Following the above case C-18/93, the Commission considered in a decision of 21 October 1997, that the rebate system for piloting tariffs in the port of Genoa remains discriminatory, in breach of the EC Treaty.

31 Communication from the Commission on services of general interest in Europe, COM (96) 113 final of 11.03.1996.

32 In the above case C-179/90, the Court explicitly held that the stevedoring services could not qualify as services of general economic interest.
could be very difficult to justify even on the ground of "service of general economic interest", such as cases where a service is not carried out but must be paid for all the same. These elements emphasise the significance of adequate monitoring by the national authorities responsible for the approval or fixing of prices, aimed at avoiding excessive or abusive tarification.

97. Self-supply, where the port users perform one or more types of services for themselves, may in some cases be considered as one alternative for the provision of services. The significance of this option in practice largely depends on the nature of the service as well as on local particularities. In general, restrictions would only seem justified if the self-supply would be detrimental to the safety standards or the functioning of the public service obligations and only to the extent absolutely necessary to avoid such risk.

Action

Port services are to be seen as an integrated part of the maritime transport system as they are indispensable for the proper functioning of this mode of transport and thereby make an essential contribution to the efficient and safe use of port and maritime infrastructure. Current practices have given rise to complaints by users and potential suppliers of such services about alleged breaches of the EC Treaty, which the Commission is currently examining on a case by case basis, as well as about divergent standards on safety and service quality.

5.5 Search for a new direction

98. In the light of the above considerations, different options could be envisaged. On the one hand, the Commission could continue its present approach of examining each complaint on a case by case basis, giving due regard to the above considerations. It would apply the EC Treaty provisions, particularly the competition rules, to the port sector, leaving specific regulations on the organisation of these services to be developed at a local, regional or national level in the Member States.

99. Complementary to the case by case approach, community action could be envisaged in the form of establishing a regulatory framework at Community level aiming at the more systematic liberalisation of the port services market in the main ports with international traffic, while taking into due consideration the safety requirements and public service obligations which are particularly relevant for the technical-nautical services. In this context, the economic and social effects of modifying the existing regimes for the port services would need to be considered.

100. Such a regulatory framework would entail the establishment at Community level of certain minimum professional qualifications and service requirements for the suppliers of technical-nautical services, such as pilots, mooring and towing undertakings based on both professional levels and standards already existing in Member States and relevant ongoing action in this field of international organisations. This would contribute to enhancing these levels and standards in all ports receiving international traffic thereby ensuring that adequate safety requirements are met throughout the Community, and would moreover facilitate the movement of these workers and the supply of these services within the Community.

101. The regulatory framework could also provide common rules for access to the port services market, taking due consideration of the specific features of this market. The objective would be to ensure that access to the market is attained in an objective, transparent and non-discriminatory manner, while taking account of the constraints at individual ports. Given that a number of practical constraints exist mainly due to safety considerations, sometimes determined by the specific geographical characteristics of the ports, some limitations on market access may be necessary.

102. In such exceptional situations where the access to a service is limited by authorising, often though concessions or licences, only a limited number of suppliers, it is essential in order to avoid discrimination to provide for a neutral, objective and transparent selection procedure. Such
authorisations, and particularly exclusive rights, should only be granted for a limited period of time that would, inter alia, allow normal recovery of investments. The public service obligations should also be organised in a fair manner, for example by establishing a system whereby all port operators would bear a reasonable and fair share of the obligation to provide permanent service, or by granting the concession or license subject to public service obligation to one single operator, duly selected, and compensate for the extra costs incurred by such an obligation. The aim is to ensure fair competition between operators, both public and private, by preventing some operators from leaving the less profitable segments of the market, such as providing the service at night, to others.

103.Finally, certain general principles for a charging system for port services could be envisaged with a view to ensuring that the prices charged reflect the cost of the facilities used and the services provided. The relevant charging regimes for ports services could be considered in the context of the proposed overall framework for port charges as already described in Chapter 4. Any steps towards liberalisation would need to be introduced gradually in order to allow sufficient time for the sector to adapt. Such a new framework would in no way prejudice the Commission’s appraisal of any complaints made in individual cases on the basis of the competition rules.

<table>
<thead>
<tr>
<th>Action</th>
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<tbody>
<tr>
<td>Complementary to the present case by case approach a regulatory framework could be developed at Community level aiming at a more systematic liberalisation of the port services market in the main ports with international traffic in order to establish, over a reasonable period of time, a level playing field between and within Community ports while ensuring compliance with port and maritime safety standards. Such a new framework would in no way prejudice the Commission’s appraisal of any complaints made in individual cases on the basis of the competition rules.</td>
</tr>
</tbody>
</table>

The objective of the liberalisation measures would be to ensure open access to the market for port services through appropriate mechanisms and requirements on the basis of transparency, non-discrimination and certain principles for charging, while determining an appropriate framework for the implementation of public service obligations, whenever they are deemed necessary, as well as of the safety requirements. As an integral part of these measures, harmonised or, at least, minimum standards for training and qualifications of the personnel and for the equipment involved should be established at E.U. level. This ensemble of actions would be especially relevant for the technical-nautical services in so far as they contribute to the efficient and safe use of port and maritime infrastructure.

However, the heterogeneous nature of these services and the diverse nature of ports (in terms of their size, function and geographical characteristics), would require a differentiated approach to the liberalisation of the various types of port services and provisions for specific situations, including the possibility to grant exemptions in certain cases where justified. Any steps towards liberalisation would need to be introduced gradually in order to allow sufficient time for the sector to adapt.

Comments are invited

This Green Paper is intended to launch an active discussion involving the Council of the Europe Union and the European Parliament, the Economic and Social Committee and the Committee of the Regions, the port authorities, operators of the port and maritime industries and associated

51 For accounting transparency see paragraph 45 above.
interested parties, together with the trade unions and other organisations representing the social interests in the sector. Comments and opinions are invited on all the positions set out in this Green Paper.

Comments should be sent to the European Commission, DGVII D/4, Rue de la Loi 200, B-1049 Brussels to the attention of Mr Aragon Morales (fax +32 2 2953076 or e-mail to: ports-green-paper@dg7.cec.be) at the latest by 1 April 1998.
The European Port sector, its diversity and its prospects

The ports of the European Union reflect its diversity in terms of geography, distribution of population as well as levels and types of economic activity. The port systems in the four main maritime regions are described below in order to give a concise description of the port sector and its prospects, to pinpoint some of the most important areas for the development of ports and to set the scene for Community initiatives in the future.

The Baltic Sea Region is a region of fundamental change and transition. The opening of Eastern Europe is bringing new opportunities for trade and travel. The EU ports in the region handled 10.5\textsuperscript{54} % more in 1996 than in 1993. It has been estimated that international traffic will grow by some 65\% until 2010. Maritime transport has considerable potential in the region since geographically the Baltic sea often offers the shortest routes. The port systems in countries which are members of the Union are characterised by a large number of smaller and medium sized ports (see Annex II map 1). Specialisation and co-operation between the ports could be a way forward in order to use resources most effectively. In order to deal with the potential growth in maritime transport, priority in this region needs to be given to linking and integrating ports more effectively with land transport, in particular those ports with considerable amounts of international traffic, and to the development of EDI systems.

The North Sea Region has the greatest concentration of industry and population in the Union. This has clear implications for both land and maritime transport. North Sea ports (see Annex II - map 2) handle 50\% of EU maritime traffic including almost half of the deep sea traffic to and from Europe (see Annex II - maps 6). The ports in the region handled approximately 6 \% more in 1996 than in 1993. It has been forecast that maritime traffic in the region will continue to grow and most of the growth is expected to be associated with containers. As a result of the concentration of traffic, some hinterland connections are facing problems of capacity and congestion: bottlenecks rather than missing links. Apart from the need to improve the quality and capacity of the road and rail networks, attention needs to be given, where possible, to developing inland waterway traffic, and feeder traffic instead of land transport. Furthermore, many ports in the region are faced with tidal restrictions. The principal problems relate to the depth of access channels and berths, which is important for deep sea ships, and the width of sea locks, which is important for short sea vessels.

The strength of maritime transport in the Atlantic Region lies in bulk traffic links with other parts of Europe and the rest of the world. This traffic accounts for 77 \% of the total turnover and tends to serve the heavy industries situated close to the ports, including refineries, power stations and chemical works. It also serves the agricultural sector through the importation of animal feedstuffs and the export of cereals. It provides the basis for the development of general cargo traffic. As the ports are closely related to industrial and agricultural activities, they play an important role in the regional economies. The ports handled approximately 5.5 \% more in 1996 than in 1993. However, ports in the Atlantic Region (see Annex II map 3) are experiencing difficulty in retaining present levels of traffic, and the opportunities for expansion are limited, mainly because the ports do not have the same markets and levels of population as those in many other parts of the Union. In fact, in most cases their effective hinterlands do not extend beyond 200 km from the coast. One of the main problems is that the ports are inadequately connected with the strategic land network and are missing east-west axial transport corridors.
The Mediterranean Region is one of great complexity and contrasts. There are enormous differences in scale, development and trading relationships and for most of the region development and cohesion are important issues. In general, the region's ports (see Annex II maps 4 and 5) have been lagging behind their northern competitors in terms of investment, pricing, efficient management, and physical accessibility to large European markets. The ports handled approximately 4.4% more in 1995 (see Annex II map 6) than in 1990. There has been in recent years, a substantial growth for container traffic in the region and this trend is clearly ongoing. In order to facilitate this growth in traffic, attention should be given to integrating the ports more satisfactorily into the transport chain. Measures to achieve this need to include rectifying organisational and operational problems in the port areas, developing port information and logistics systems which are compatible with those of the land networks and promoting short-sea-shipping, particularly in view of the increasing economic links with the non-member countries of the region. In doing so the ports should be able to gain more traffic and achieve higher utilisation rates.
The ports on the maps are identified on the basis of the following criteria:
- total annual traffic volume of no less than 1 million tonnes freight, or,
- total annual traffic volume of no less than 200 000 international passengers.

The port turnover figures used in the maps have been provided by the Member States, while figures on container traffic are extrapolated from those published in: "The European container market - prospects to 2008" Ocean Shipping Consultants, 1997.

The traffic flows shown in maps 6 and 7 of Annex II are estimated on the basis of UN Commodity Trade statistics for 1993.
PORT TURNOVER IN 1996

FREIGHT (in million tonnes)
- 1 - 5
- 5 - 10
- 10 - 20
- 20 - 50
- > 50

PASSENGERS/year
- 200.000 - 500.000
- 500.000 - 1.000.000
- > 1.000.000

* Only ports with less than 1 million tonnes freight year and at least 200.000 international passengers/year

REGIONAL CONTAINER TURNOVER

Traffic volume (in million TEUs)

Growth with respect to the previous period
TRANSEUROPEAN TRANSPORT NETWORK OUTLINE PLAN
SECTION: SEAPORTS
NORTH SEA

PORT TURNOVER IN 1996

<table>
<thead>
<tr>
<th>FREIGHT (in million tonnes/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5</td>
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<tr>
<td>5 - 10</td>
</tr>
<tr>
<td>10 - 20</td>
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<tr>
<td>20 - 50</td>
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<tr>
<td>&gt; 50</td>
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</table>

<table>
<thead>
<tr>
<th>PASSENGERS/year *</th>
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</thead>
<tbody>
<tr>
<td>200,000 - 500,000</td>
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<tr>
<td>500,000 - 1,000,000</td>
</tr>
<tr>
<td>&gt; 1,000,000</td>
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</tbody>
</table>

* Only ports with less than 1 million tonnes freight year and at least 200,000 international passengers/year

REGIONAL CONTAINER TURNOVER

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Traffic volume (in million TEUs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>6,712</td>
</tr>
<tr>
<td>1985</td>
<td>9,453</td>
</tr>
<tr>
<td>1990</td>
<td>13,352</td>
</tr>
<tr>
<td>1996</td>
<td>15,925</td>
</tr>
</tbody>
</table>

Growth with respect to the previous period

MAP 2
TRANSEUROPEAN TRANSPORT NETWORK
OUTLINE PLAN
SECTION: SEAPORTS
ATLANTIC AND PERIPHERAL ISLANDS

PORT TURNOVER IN 1996

<table>
<thead>
<tr>
<th>FREIGHT [in million tonnes/year]</th>
<th>PASSENGERS/year *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>200,000 - 500,000</td>
</tr>
<tr>
<td>5-10</td>
<td>500,000 - 1,000,000</td>
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<tr>
<td>10-20</td>
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<td>20-50</td>
<td></td>
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<tr>
<td>&gt; 50</td>
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</tbody>
</table>

* Only ports with less than 1 million tonnes freight/year and at least 200,000 international passengers/year

REGIONAL CONTAINER TURNOVER

<table>
<thead>
<tr>
<th>Year</th>
<th>Container Traffic (in TEU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>1,419.0</td>
</tr>
<tr>
<td>1985</td>
<td>2,226.9</td>
</tr>
<tr>
<td>1990</td>
<td>2,171.3</td>
</tr>
<tr>
<td>1996</td>
<td>3,293.0</td>
</tr>
</tbody>
</table>

Growth with respect to the previous period
- 1980: +19.1%  
- 1985: +40.5%  
- 1990: +16.2%  
- 1996: +50.0%

Atlantic Ocean
TRANSEUROPEAN TRANSPORT NETWORK OUTLINE PLAN
SECTION: SEAPORTS
MEDITERRANEAN SEA (WEST)

PORT TURNOVER IN 1996

- FREIGHT (in million tonnes/year)
- PASSENGERS/year

1. Only ports with less than 1 million tonnes freight/year and at least 200,000 international passengers/year

REGIONAL CONTAINER TURNOVER: Regional share in total E.U. container traffic (%)

Traffic volume (in million TEUs)
Growth with respect to the previous period

The figures relate to the Mediterranean Region as a whole.

Mediterranean Sea (West)
<table>
<thead>
<tr>
<th>Port Name</th>
<th>1980</th>
<th>1985</th>
<th>1990</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augusta</td>
<td>2.17</td>
<td>3.43</td>
<td>4.37</td>
<td>8.03</td>
</tr>
</tbody>
</table>

1. The figures relate to the Mediterranean Region as a whole.

* Only ports with less than 1 million tonnes freight year and at least 200,000 international passengers/year
Passenger turnover per year in each maritime region, in 1993 and 1994/95/96 (in million passengers), Atlantic and Baltic: figures for 1993 not available (1)

Traffic growth between 1993 and 1996 in the different maritime regions - in % - (1)

(1) In order to estimate the traffic growth in the different maritime regions between 1993 and 1996, the assessment was made on the basis of ports for which traffic data was available both in 1993 and 1996. Therefore, the traffic figures for each maritime region do not relate to the total regional turnover.

Estimated cargo flows between different maritime regions in 1993.

**TRANSEUROPEAN TRANSPORT NETWORK OUTLINE PLAN**

**SECTION: PORTS**

**FREIGHT AND PASSENGER TURNOVER IN 1996 PER COUNTRY (1)**

Estimated cargo flow between the different maritime regions in 1993.

**FREIGHT AND PASSENGER TURNOVER PER COUNTRY (1)**


Annual freight turnover (in million tonnes)  
Annual passenger turnover (in million)

Estimated Inter Regional traffic flows (1993: in million tonnes).
Annex III: Port charging

When drawing up a possible future Community framework for port charging at least the following three objectives have to be taken into account:

- Economic efficiency;
- Fair treatment of well developed and less developed ports; and
- Cohesion policies.

It might not be possible to meet all three objectives at the same time but a future framework should be designed in such a way that it will take these objectives into account in a balanced manner. In the following paragraphs the different objectives are outlined and discussed.

Economic efficiency

Economic efficiency requires charges to be set in line with marginal costs since this would inform port users of the costs of their individual transport decisions for society as a whole. Provided that charges are set in a similar way across all modes of transport, this would generate an optimal (i.e. least cost) modal split. Moreover, the application of this principle would also lead to an optimal distribution of traffic across ports and, thereby, minimise the costs of handling maritime transport for the Union as a whole. However, for projects just like any other infrastructure the bulk of the total costs are due to capital investment rather than operating costs. Consequently, if the marginal cost pricing principle is introduced, it could occur that due to overcapacity or competition only short-run marginal cost (i.e. operating costs) are charged. In this case the costs of past investments will not be fully recovered. On the other hand, whether the costs of future investments will be completely recouped with marginal cost pricing will depend on the specific way the principle is implemented.

Some argue that economic efficiency in the port sector can best be achieved if investments in port infrastructure are demand driven and that this should be ensured by requiring that all costs of investments are recovered from users. Full cost recovery could, in principle, be guaranteed where past investments are taken into account (i.e. average cost charging). However, an approach based on marginal cost pricing, which would consider new investments in addition to operating and external costs, would make a significant contribution towards cost recovery and at the same time avoid to consider historical investments in ports.

Fair treatment of well developed and less developed ports

Introducing a new charging principle based on economic efficiency from one day to another could, however, lead to an unfair situation between ports taking into account that they have developed differently in the past. It could therefore be argued that the introduction of a Community port charging regime would have to be accompanied by rules to avoid unfair treatment of new ports or ports that are in need of significant development. The reasoning behind this argument is that since, in the absence of a Community regime, “well developed” ports have had the opportunity to expand significantly through government support, “new” or “less developed” ports should be granted a similar treatment (possibly temporarily) within the framework of the Community charging regime. Whatever the merits of this equity argument, such an approach would be at the expense of economic efficiency since some capacity available in “well developed” ports can be used at lower cost even when account is taken of the costs of longer journeys to the ports in question. Adding additional capacity before ensuring that the existing capacity is better utilised would seem unnecessary. The equity issue can partly be addressed by a progressive introduction of the new charging framework (which, however, should not provide for too long a transition phase since that could have negative effects). Moreover, to the extent that the distinction between well
developed/less developed ports tends to coincide with the cohesion classification, the special rules for ports in Objective 1, cohesion and peripheral areas would also assist “new” ports.

Cohesion policies
In order to promote cohesion the Community’s State aid rules allow a larger degree of government support for investments in less developed regions compared to the rest of the Community. This approach could also be followed by the port charging framework by granting partial derogations from the charging rules for ports in Objective 1, cohesion and peripheral regions. Clearly, the extent to which such derogations are accepted would have to be balanced against the distorting effect they would have on port competition and thereby on economic efficiency.

A possible way forward
This discussion shows that different objectives have different implications for designing a Community pricing regime. The approach advocated in the Green Paper proposes that charges should be progressively based on marginal costs and ensuring cost recovery of new investments in addition to operating and external costs, but that partial derogations should be possible in Objective 1, cohesion and peripheral regions. Such an approach permits the different objectives, which are to some extent in tension, to be pursued in a balanced manner.

Operational ways of defining and implement the marginal cost pricing principle would have to be developed. One possibility would be to base port charges on an assessment of the costs per unit of transport of the expected increase of volumes handled in a port by a certain percentage (possibly to be varied depending on the type of port). In this case the problem would need to be solved, how fixed costs need to be allocated to port users. Another approach would be to carry out such an assessment with respect to a fixed time horizon (e.g. five years). A third possibility could be to require that port charges fully recover operating costs and capital costs of investments made after a certain date. This might require information about the depreciation of the investment.