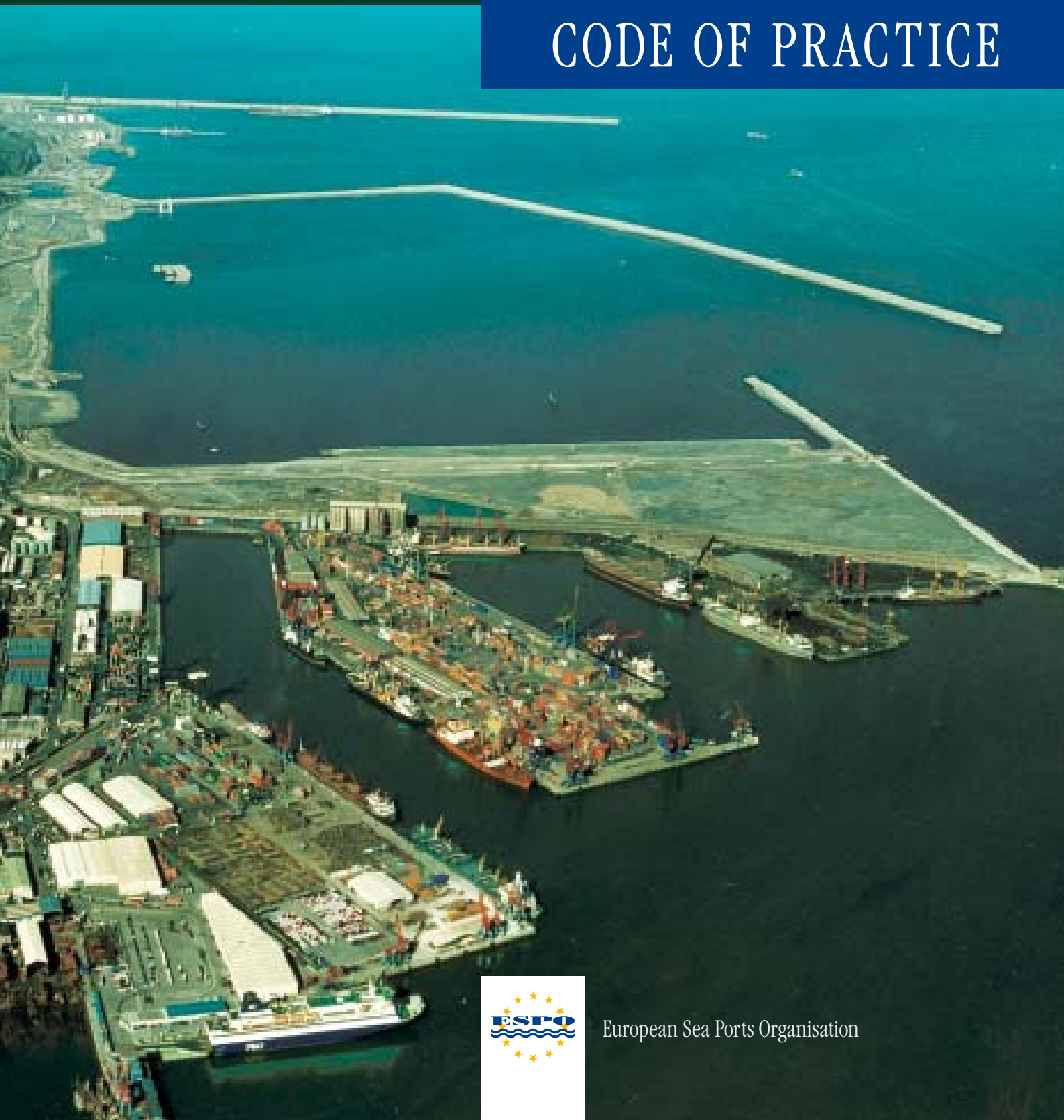


ESPO

# ENVIRONMENTAL CODE OF PRACTICE



European Sea Ports Organisation



# ESPO ENVIRONMENTAL CODE OF PRACTICE

Executive Summary	p. 3
Foreword by the European Commission	p. 4
Introduction by the Chairman of ESPO	p. 5
Part I - Environmental Policy Code	p. 7
Part II - Environmental Port Policy Background	p. 11
Section I – The Port Sector and the Environment	p. 12
1. Overview of the Port Industry	p. 12
2. Initiatives undertaken by the Port Sector in the field of Environment	p. 12
Section II – The European Dimension	p. 14
1. Transport Policy	p. 14
2. Main Environmental Principles	p. 14
3. Environmental Objectives set out in the Sixth Environment Action Programme	p. 15
Part III - Handbook of Recommended Environmental Practices	p. 17
Section I – Environmental Framework for Port Administrations	p. 18
A. Port area	p. 18
1. Port Development	p. 18
2. Dredging and Disposal of Dredged Material	p. 19
3. Soil Contamination	p. 20
4. Noise Management	p. 20
5. Port Waste Management	p. 21
6. Water Quality and Management	p. 22
7. Air Quality and Management	p. 22
8. Monitoring the Port Environment & Reporting	p. 23
9. Port Preparedness and Contingency Plans	p. 24
B. Ship/Port Interface	p. 25
1. Ship Waste Management	p. 25
2. Cargo Handling	p. 25
3. Hazardous Cargo	p. 26
C. Maritime area	p. 27
1. Maritime Safety	p. 28
2. Ship Emissions	p. 28
Section II – Ports and Environmental Management	p. 29
1. Environmental Audit	p. 29
2. Environmental Review	p. 29
3. Environmental Management System	p. 29
4. Decision Support System	p. 30
5. Port Visitor Internet Tool	p. 31
6. Improvement Programme	p. 31
ANNEX	p. 32



## EXECUTIVE SUMMARY

The Environmental Code of Practice was adopted by the General Assembly of ESPO in April 2003. It revises the first Code, which was published in 1994, in the light of EU legislative changes and of the progress achieved by the port sector in developing sustainable port policies.

Sustainable port development and management have become an imperative on several grounds. Society, stakeholders and clients see sustainable development as a necessity for the acceptance of the port in the local economy. More and more, environmental legislation requires from the port management to act in a sustainable way. Moreover, ports themselves understand that an environmentally friendly attitude can also be a strong commercial argument.

The new Code reiterates the port sector's collective commitment to contributing to sustainable development in its three dimensions – social, economic and environmental – and demonstrates that the port sector is improving its environmental performance.

Ports differ within Europe in several aspects, ownership, financial structure, activities, environmental responsibilities:

- Some ports organisations are responsible for management of the whole port area and may own at the same time port companies (including cargo operation companies), while others may only act as landlord or have mixed functions with respect to port operations.
- The port area management is in some cases governed by environmental permits and in other cases not. Companies in the port area are almost in all cases governed by environmental permits.

Stakeholders, however, often see the port area as one system. They consider the port manager as the contact-person for every environmental issue in the port area, even if the port administration has no direct responsibility. Moreover, even if they are not immediately responsible for the activities carried out in the port area, port administrations still bear a certain general public responsibility which will be strengthened by the forthcoming Environmental Liability Directive.

Therefore ESPO advises port administrations, with or without direct environmental responsibility, to use this Environmental Code of Practice to help them in developing tools to manage environmental issues. This will contribute to the full integration of ports in their wider community.

**Part I** of the Code sets out 10 objectives which the EU port sector should aim to achieve (*Environmental Policy Code*). **Part II** of the Code highlights the achievements of the port sector in the past years in the field of the environment and recalls the European policy context (*Environmental Port Policy Background*). **Part III** of the Code presents an overview of (current and coming) environmental legislation, its effects on ports as well as guidelines for port administrations for managing the implementation of EU legislation in accordance with the principles highlighted in the “Environmental Policy Code” (*Handbook of recommended environmental practices*). Finally, a *library of Environmental policy and guidelines* is available, as an **Annex** to the Code, on ESPO's website.

## FOREWORD BY THE EUROPEAN COMMISSION

By Mr. Fotis Karamitsos,  
Director Maritime Transport and Intermodality, DG Transport and Energy (TREN)

It is with great pleasure that I welcome ESPO's revision of its *Environmental Code of Practice*.

Back in 1994, its first version was welcomed by all involved in maritime transport and environmental affairs, including, of course, the Commission, as a groundbreaking initiative by the newly established European Sea Ports Organisation.

It put on the agenda the close relationship between ports and environmental protection, admitting that ports must, like all industries, commit to obey and respect environmental laws and regulations.

Following up on its action, during this last decade, ESPO published an *Environmental Review*, in which welcome environmentally related actions and progress were presented.

The decision by ESPO to revise its *Environmental Code of Practice* reflects the increased awareness of European citizens in respect to the protection of the environment. Indeed, the public demands that industrial activities have the least possible negative environmental impact.



The EU, and the Commission in particular, have taken note of this demand and integrated it in all policies, including of course transport.

For example, the White Paper on Transport stressed that one of the ways to achieve the objective of reducing road traffic and congestion is to encourage and promote short sea shipping.

However, if short sea shipping is to reach its full potential, ports, which are the natural starting and end points of every sea voyage, have to give an image of efficiency, effectiveness and environmental friendliness. This is even more important at present with the EU's historic enlargement less than a year away.

We, in the Commission, are active on all those fronts, in parallel presenting various legislative initiatives and implementing existing EU legislation.

It is also, however, up to the ports' industry itself, through self-regulation, to set its own standards, objectives and goals in relation with environmental protection and then proceed to a monitoring of those through a peer review.

In the past decade ESPO has done this with a high level of success and consistency. I wish them to do even better in the coming years.

## INTRODUCTION BY THE CHAIRMAN OF ESPO

By Mr. David Whitehead,  
Chairman of the European Sea Ports Organisation

I am delighted to present ESPO's new Environmental Code of Practice which fully revises and updates our first Code of Practice produced almost 10 years ago.

My thanks go first of all to the ESPO Environment Committee and the Secretariat for all their hard work in drawing up this important new Code.

The environment has always been a major priority for ESPO. We have made a firm link between effective environmental management and effective port management – the two go hand in hand. If we are to secure the future for new port development and new investment this must be done with environmental protection to the forefront.

ESPO is in a unique position to encourage best practice amongst its member ports and to set challenging targets. This new Code is part of that process. The “ten environmental commandments” show our commitment to sustainable development and efficient and effective management practices.

ESPO is very proud of its track record in environmental research. Last year, the ECOPORTS project was launched to build on the successes of Eco-Information. The Environmental Certification Scheme created by the project and administered by Lloyd's Register is a clear way in which ports can indicate their environmental progress. We are committed to seeing the expansion of the scheme throughout the sector.

We are equally committed to measuring our progress through regular surveys of the ESPO membership and through publications such as the recent Environmental Review.

Ports and shipping have a special status as the most environmentally friendly transport mode. We believe that this new Code makes a further contribution to maintaining that status.







# ESPO ENVIRONMENTAL CODE OF PRACTICE

## PART I: ENVIRONMENTAL POLICY CODE



*By implementing the ten following environmental objectives, the European port sector aims to continuously work towards improvements of its overall environmental performance.*

## ENVIRONMENTAL POLICY CODE

The main environmental objectives which the EU port sector should aim to achieve are:

1. To contribute to the development of a **sustainable logistics chain**, as ports are key elements of the Trans-European Network.
2. To encourage **wide consultation, dialogue and cooperation** between port administrations and the relevant stakeholders at local level (port users, public, NGOs) to facilitate the reconciliation, at an early stage, of differing interests and the acceptance of port projects by the local community.
3. To generate new knowledge and technology and to develop **sustainable techniques** which combine environmental effectiveness and cost efficiency. The aim is to achieve **self-regulation** and develop **a bottom-up approach**. Even if the EU decides to issue environmental regulations, the existing self-regulatory instruments, developed by the port sector itself and which address day-to-day practice, will provide a port-accepted background to be used as a basis for EU environmental policy. This will enable EU legislation to be more easily supported and implemented.
4. To enhance **cooperation between port administrations** in the field of environment and facilitate the **exchange of experiences** and implementation of **best practices** on environmental issues to avoid unnecessary duplication and enable port administrations to share the costs of environmental solutions. This can be notably achieved through the participation of port administrations in a network, which will be coordinated by the ECOPORTS Foundation. The aim is to create a **level playing field** by limiting poor environmental practice as a competitive factor between port administrations.

5. To increase awareness of environmental concerns and to integrate sustainable development into ports' policies, by encouraging port administrations to prepare a publicly available **environmental policy** setting out their strategies and methods of achieving them. This will contribute to promote a “corporate social responsibility” on the port.
6. To encourage port administrations to conduct appropriate **environmental impact assessments** for port projects and appropriate **strategic environmental impact assessments** for port development plans to assess, at an early stage, how their effects on the environment can be minimised.
7. To stimulate continual improvement in the port environment and its port environmental management by promoting the use of **Environmental Management Information System tools** (such as environmental audit, environmental review, environmental management system, decision support system, port visitor internet tool, as developed by the ECOPORTS Foundation).
8. To promote **monitoring, based on environmental performance indicators**, as recommended by the 2001 ESPO Environmental Review, in order to measure objectively identifiable progress in environmental port practices.
9. To promote **environmental reporting** as a means of communicating environmentally good behaviour to stakeholders and the European institutions, in line with the recommendations of the ESPO Environment Review published in 2001.
10. To intensify the **communication about environmental improvements** achieved by ports, with the aim to create a better understanding of the role of ports and their efforts towards sustainability.

This “Ten Commandments” list is available in all Community languages on ESPO's website <http://www.espo.be/publications/index.asp>



# ESPO ENVIRONMENTAL CODE OF PRACTICE

## PART II: ENVIRONMENTAL PORT POLICY BACKGROUND



*This Part highlights the achievements of the port sector in the past years in the field of the environment and recalls the European policy context.*

## SECTION I - THE PORT SECTOR AND THE ENVIRONMENT

### 1. Overview of the Port Industry

The vital importance of the ports industry for EU trade is demonstrated by the statistics: the maritime sector is responsible for over two thirds (70%) of all trade between the Community and the rest of the world, as well as 41% of goods traffic within the Community (Short Sea Shipping). Ports are the gateway for the movement of millions of passengers each year and a wide range of goods (including vehicles, fresh food, steel, timber, building materials, machinery and manufactured goods) and raw materials (oil, petroleum, chemicals, ores, grain and animal feedstuffs) which are needed to fuel the European Union's economy. Ports provide a range of other services besides cargo handling and the transfer of passengers, for example fishing, as well as leisure and recreational facilities. They also accommodate various industrial installations (refineries, power plants, etc.). As a result, ports act as magnets for trade and industry and as generators of employment.

As recognised by the Commission's White Paper "*European Transport Policy for 2010: Time to Decide*", the ports industry is at the heart of the maritime sector. It can make a major contribution to the achievement of sustainable mobility, being in the centre of environmentally friendly water and rail-based transport systems.

Sound environmental practices in ports complement the environmental advantages of shipping.

### 2. Initiatives undertaken by the Port Sector in the field of Environment

The port sector has proved its commitment to environmental improvement by publishing its first European Environmental Code of Practice in 1994 and by undertaking a number of pan-European environment-focused projects.

Developing a Code of Practice was one of the first tasks taken on by ESPO following its creation in 1993. This was the very first time that European port administrations had expressed a collective view and approach. The Code was intended to be a clear expression of their collective commitment to environmental improvement. It therefore made a series of important recommendations about the integration of environmental protection policies into all aspects of their operations. The Code stimulated a new awareness of coming environmental rules and their implications. It spread the message that environmental effectiveness meant cost-efficiency.

Even during the relative short period since the first ESPO Code was published, concern about the environment and the development of sustainable policies has increased, bringing about advances in policy and legislation. In the light of such changes ESPO published an Environmental Review in 2001, reviewing the progress that had been made and the action taken since the publication of the Code. It further set out a series of highly innovative recommendations for future action:

- Ports should prepare a publicly available environmental policy setting out their strategies and methods of achieving them;
- Plans should be reviewed regularly to take account of legislative and other changes;
- Ports should produce a publicly available annual environmental review;
- Ports should consider what environmental monitoring is required to assess their environmental progress;
- Ports should establish a number of relevant environmental indicators with targets to measure progress;
- Ports should consult adequately the local community on its environmental programme.

Further to its commitment, through the ESPO Code and Environmental Review, to environmentally friendly behaviour, the EU port sector undertook several projects aimed at improving the environmental performance of its activities.

The Soil Recycling project (1995-1996) developed a guideline for port management in relation to contaminated soil and demonstrated the practical benefits of sharing knowledge on technological and procedural solutions for re-use of contaminated port sites.

The ECO-Information project (1997-1999) developed a dedicated set of environmental management tools for the port administrations: an audit tool (Self-Diagnosis Method – SDM 98), an information engine (Database and Methodological Guide) and a communication platform (website [www.ecoport.com](http://www.ecoport.com)). More importantly, the project developed an extended network of port administrations; more than 60 European port administrations participated in the test-run of these tools. The ECO-Information project acted as a catalyst for action amongst many of the European port administrations and stimulated considerable progress in port environmental management.

### Progress in Port Environmental Management 1996-1999\*

More port administrations:

- Carry out environmental monitoring	(+13%)
- Have an Environmental Plan	(+17%)
- Involve community and other stakeholders	(+17%)
- Designate Environmental personnel	(+18%)
- Aim for environmental 'Compliance Plus'	(+28%)
- Encourage internal and external environmental awareness	(+45%)

(\* Data based on ESPO Survey 1996 and ECO-Information SDM responses 1999)

In 2002 port administrations took things one step further by starting the 3-year voluntary project ECOPORTS on “information exchange and impact assessment for enhanced environmental conscious operations in European ports and terminals.” The main goal is to harmonise the environmental management approach of port administrations in Europe, to exchange experiences and implement best practices in respect of port-related environmental issues. ECOPORTS maintains the momentum created so far and is leading the port sector towards self-regulation.

The ECOPORTS project aims to create a level playing field by limiting the environment as a competitive factor. In this project, port administrations assist each other to avoid double work and share the costs of development of joint solutions. The envisaged products of the project include an Environmental Management and Information System (EMIS), a training system to familiarise port managers with EMIS tools and an extended network of port administrations which will continue to interact and exchange best-practice information after the end of the project.

The ECOPORTS project also develops tools that will help port administrations to put the recommendations of the 2001 Environmental Review into action (for instance, the Port Environmental Review System (PERS) can be used as a standard for the implementation of these recommendations).

All projects, Soil Recycling, ECO-Information and ECOPORTS, were funded by the European Commission, which shows again their importance and contribution to EU environmental policy.

## SECTION II - THE EUROPEAN DIMENSION

### 1. Transport Policy

The Göteborg European Council in June 2001 adopted an EU strategy for sustainable development, which highlighted that maritime transport could make a contribution to breaking the link between economic growth and road congestion.

The White Paper *“European Transport Policy for 2010: Time to Decide”*, published by the Commission in September 2001, responded to the concerns raised in Göteborg and came up with a number of proposals to integrate transport and sustainable development. The Commission notably proposes to shift the balance between modes of transport, by limiting the increase in road traffic and encouraging the use of modes such as rail, inland waterway and Short Sea Shipping. The White Paper acknowledges the key role that ports can play in the development of maritime transport and therefore in the rebalancing between the different modes of transport.

### 2. Main Environmental Principles

EU environmental policy is nowadays mainly guided by three principles: public access to information, public participation in decision-making and the “polluter pays” principle.

The first two principles result from the Aarhus Convention, which grants rights to the public on access to information, participation in decision-making and access to justice. To align the EU legislation with the provisions of the Aarhus Convention (which was signed by the EU in 1998), the European Parliament and Council have adopted Directive 2003/04 EC on public access to environmental information, which will be completed by another Directive providing for public participation drawing up certain plans and programmes relating to the environment.

These principles are not implemented only in the specific texts above-mentioned. They reflect a general trend in EU environmental policy. For instance, the Water Framework 2000/60/EC and the Strategic Environmental Assessment 2001/42/EC Directives also contain provisions on public participation.

The principle that the polluter should pay for the damage caused to the environment also marks a new approach in EU environmental policy. It has been introduced by the Commission, on a general basis, in a proposal for a Directive on environmental liability. This is a horizontal proposal covering all activities, and it aims both to prevent and restore environmental damage. The polluter pays principle is moreover reflected in other legislation, such as the Water Framework Directive.

The White Paper on Common Transport Policy also adopts this philosophy by announcing measures on charging for the use of infrastructure, meaning that prices should also reflect external costs, such as congestion, pollution and accidents.



### 3. Environmental Objectives set out in the Sixth Environment Action Programme

The 6<sup>th</sup> Environment Action Programme “*Environment 2010: Our Future, Our Choice*”, adopted in September 2002, constitutes a framework for the Community’s environmental policy during the next 10 years. It seeks new and innovative instruments for meeting complex environmental challenges. Legislation is not abandoned, but a more effective use of legislation is sought together with a more participatory approach to policy-making, including the active involvement of the industry.

One of the purposes of this Code is to take forward this process in a practical way by stimulating participation in initiatives which seek to provide a framework of knowledge. This will serve as a basis for ESPO to formulate policy and make appropriate recommendations.



# ESPO ENVIRONMENTAL CODE OF PRACTICE

## PART III: HANDBOOK OF RECOMMENDED ENVIRONMENTAL PRACTICES



*In section I, the Code presents an overview of environmental legislation as well as its effects on ports (as the Code is a document to be used for a number of years it also provides for the trends – in the form of forthcoming Directives – in the field of European environmental policy).*

*Detailed and up-dated information on the regulations and guidelines mentioned in the Code can be found in a “library” contained in the Annex, which is available on the ESPO website: <http://www.espo.be>*

*The section also makes a number of important recommendations to port administrations to manage the implementation of EU legislation in accordance with the principles highlighted in the “Environmental Policy Code”. It does not include mandatory requirements. EU legislation is implemented in different ways at the national and local levels; responsibility for the implementation of environmental legislation and policy varies from port to port and from member state to member state. The Code provides practical guidelines to port administrations when developing their environmental policies.*

*Section II presents port environmental management tools, which can be used to deal with the issues developed in section I.*

## SECTION I - ENVIRONMENTAL FRAMEWORK FOR PORT ADMINISTRATIONS

The role of port administrations in tackling environmental issues can be analysed from 3 perspectives:

- Port area (land and sea)
- Ship/Port interface
- Maritime area (outside the port area)

The following sections will demonstrate that the ports industry is committed to developing voluntary schemes in order to move towards self-regulation.

### A – PORT AREA

The activities of industries located in the port area affect the port area as a whole. As a result, the interests of the port administration are also related to the environmental effects of the actions undertaken by industries in its port. The port administration therefore stimulates environmentally friendly behaviour in the port area.

#### 1. Port Development

##### *i) The issue and the rules*

Global competition puts pressure on European port administrations to offer infrastructure and facilities which accommodate the wishes of their customers. On the other hand, port development in Europe is more and more constrained by scarcity of land, urban development and ecological considerations. Port development can be affected by the requirements of a series of Directives: Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), Conservation of Wild Birds, and Conservation of Natural Habitats and of Wild Flora and Fauna. Moreover, port development should be seen in the context of Integrated Coastal Zone Management (ICZM). This approach requires a comprehensive assessment, setting of objectives and planning of coastal systems and resources.

The environmental principles set in the above-mentioned Directives can conflict with the interests of ports, as the fulfilment of these requirements may hamper the development of port projects, therefore leading to great delays in their completion and increasing costs. The implications are heavily influenced by the way legislation is transposed into national legislation, as well as by the national and regional-specific rules (e.g. port extensions may be limited due to city-specific planning reasons). ESPO started to study more in detail the impact of the Birds & Habitats Directives on port development, by carrying out a survey amongst its members and by organizing a seminar in Genoa in November 2002. This seminar highlighted the above-mentioned conflict and also gave examples of good practices which ports have developed to reconcile their activities with nature protection. The issue will remain high on ESPO's agenda. ESPO will encourage good practices and exchange of experiences whilst at the same time drawing the attention of the EU institutions to the adverse effects of the Birds and Habitats Directives on port development and activities.

##### *ii) Recommended guidelines*

Bearing in mind the legal framework and the system of planning consents as operated in each member state, it is recommended that:

- Port administrations conduct appropriate environmental impact studies where possible, even if not strictly required under the terms of the Environmental Impact Assessment Directive;
- All port administration plans make sure they collect the public and stakeholders' opinion in the planning period, according to the Strategic Environmental Assessment Directive; a carefully designed public outreach programme can ensure the involvement of all stakeholders;
- Port administrations get involved in the early processes of designation of protected areas;
- Port administrations enter in a constructive dialogue with NGOs and local authorities concerning the management of the area designated under the Birds/Habitats Directives on their territory and its implementation;
- If they plan to develop a project in a protected area, port administrations follow strictly the different assessment steps provided for in Article 6, paragraphs 3 and 4 of the Habitats Directive. They should consult with the European Commission and national administrations in order to get their plan/project duly authorized.

## 2. Dredging and Disposal of Dredged Material

### *i) The issue and the rules*

Dredging is an essential activity for maintaining accessibility to ports and has come under pressure because of environmental considerations. The designation of protected areas under the Habitats Directive 92/43/EEC poses limitations on both dredging and disposal of dredged material. It could result from the implementation of the Water Framework Directive 2000/60/EC that turbulence in water bodies, which is a normal consequence of dredging, be not allowed in certain areas, which would make dredging very complicated.

Furthermore, in some ports dredged material may be contaminated to an extent that environmental requirements need to be fulfilled before its disposal. The disposal of dredged material is closely controlled through permits provided by national legislation which originates, in the North-East Atlantic, from the OSPAR Convention (Combined Oslo and Paris Convention), in the Baltic Sea Area from the Helsinki Convention, in the Mediterranean Sea Area from the Barcelona Convention and in the Black Sea Area from the Bucharest Convention. The OSPAR Commission and the Helsinki Commission (HELCOM) have adopted similar guidelines addressing specifically the disposal of dredged material in the maritime area. Both guidelines put a big burden in terms of information requirements and related costs.

### *ii) Recommended guidelines*

Where port administrations are involved in dredging activities, they are recommended to:

- Get involved in consultations with the competent authorities on the impact of legislation on their dredging activities;
- Minimize the effects on the environment of dredging operations as far as practicable and according to the Technical Annex included in both the OSPAR and HELCOM guidelines;
- Depending on their geographical position, adopt the guidelines of the OSPAR Commission or the recommendations of the Helsinki Commission for the disposal of dredged material by dumping in the maritime area;
- Exchange information and best practice experience on a voluntary basis.

Port administrations are also recommended to encourage those responsible for dredging to follow the same lines.

### 3. Soil Contamination

#### *i) The issue and the rules*

The port area historically accommodates a great range of activities, which are, or have been, the source of soil contamination. From the point of view of a port administration, soil contamination means damage to the sites that it rents, and consequently a reduction in value of its assets. This can lead to complex and time-consuming juridical processes aiming at the restoration of the site, puts pressure on attractiveness for new investors, and delays potential income from rent and spin-off activities because the site cannot be used. In several ports, land lease contracts therefore contain environmental paragraphs. The 'polluter pays' principle, which will be put into action with the forthcoming Directive on Environmental Liability, will provide some more protection to port administrations, but it may also create the need to assign a special budget to pay for the restoration of the site on behalf of the polluter and to set up a legal system to claim back the money from the polluter. Still, a certain financial risk for the port administrations remains, especially if the tenant is insolvent or cannot be traced after the end of their contract.

In April 2002 the European Commission issued a Communication announcing that a Community thematic strategy for the protection of soil against erosion and pollution will be presented in 2004. This was the first time that soil pollution was addressed in an explicit Community policy. This strategy will take into consideration the principles of precaution, anticipation and environmental liability, while it will use soil monitoring as a basis for future legislative initiatives.

#### *ii) Recommended guidelines*

The "Soil Recycling in European Ports" project (1995-1996) produced a guideline for port management in relation to contaminated soil. Although this is not an exhaustive and detailed handbook, it is a valuable source of port-specific experience.

For a better protection of their interests, port administrations are recommended to:

- Create a clear and consistent soil policy aiming at preventing financial and environmental risks;
- Incorporate soil management aspects into contracts with their tenants;
- Nominate representatives for communication with and control of their tenants;
- Create facilities to inform and stimulate the tenants about their responsibilities;
- Monitor the port area for early identification of soil contamination sources.

### 4. Noise Management

#### *i) The issue and the rules*

Determining "noise capacity" consists of setting the limits for permissible noise levels for individual companies as well as for the port area as a whole. A good functioning noise management system will have the character of a social, environmental as well as commercial instrument. Port administrations have already been trying to find a balance between facilitating the needs of their tenants and making the most efficient use of the port area within the existing noise limits. Port area noise

capacity will come under further pressure as the Directive 2002/49EC on the “Assessment and Management of Environmental Noise” requires that ports will be included in strategic noise maps (2006) and action plans (2008) for the management of noise, including noise reductions if necessary. For port administrations, reduction of the port area noise capacity could result in reduced possibilities for new investors, and therefore affect their income from rent and spin-off activities in the port area.

*ii) Recommended guidelines*

Port administrations are recommended to:

- Get involved in early consultations with the competent authorities responsible for making the noise maps and action plans;
- Develop instruments/tools to enhance the efficient use of the available noise capacity;
- Take initiatives to voluntary exchange best practice experience in port area noise management.

## 5. Port Waste Management

*i) The issue and the rules*

Port activities produce waste that has to be removed following certain rules. Important variations can be observed in the national legislation of member states regarding the responsibility for waste management.

*ii) Recommended guidelines*

Waste does not only involve costs, it also entails a commercial possibility as waste can mean money if it is reused, recycled or burned for energy recovery. Waste management should involve the channelling of waste using systems which are technically proven, commercially viable and which comply with national and EU public health and environmental safeguards.

Port administrations are recommended to:

- Incorporate in a single strategy for the whole port area the EU's waste management hierarchy as defined in the Commission 1996 EU Waste Strategy and put into practice in the sixth Environment Action Programme:
- Waste prevention;
  - Waste recovery;
  - Waste disposal.

## 6. Water Quality and Management

### *i) The issue and the rules*

The Water Framework Directive 2000/60/EC is set as the basis of the water strategy of the European Union. The Directive introduces a system of water management by river basin - the natural, geographical and hydrological unit - instead of according to administrative or political boundaries. It covers all types and uses of water, including surface water, groundwater, transitional and coastal waters. The Directive introduces new concepts for the ecological and chemical protection of surface water and the chemical status of groundwater. Also introduced is the concept of “cost recovery” for water services. Member States are required to incorporate resource and environmental costs in water prices in accordance with the “polluter pays” principle.

It is possible that the major implications for port administrations will be the practical consequences of ensuring that the water, within which port operations are carried out, can be brought up to and maintained at the necessary quality standards without jeopardizing economic operations. It is important that operations essential to the satisfactory running of a port are fully understood by the legislators, both national and European, and proper allowances are made so that port operations would not be inhibited. It is not yet clear how the water quality provisions in the Directive will be implemented but account must be taken of the impact of dredging and other routine port operations.

The impact of cost recovery under the Directive on ports still needs further assessment.

### *ii) Recommended guidelines*

The concept of river basin management means that the interests of port operations will have to be combined with the interests of other activities, e.g. agriculture, that affect the same river basin. Port administrations are recommended to:

- Get involved in the early processes of defining boundaries of water bodies and defining the water bodies themselves;
- Get involved in the consultation process with the competent national authorities and ensure that they inform these authorities of their interests;
- Participate fully in the preparation and delivery of the appropriate river basin management plans;
- Prepare plans to ensure efficient use of water.

## 7. Air Quality and Management

### *i) The issue and the rules*

Air quality in the port area is mainly affected by emissions from the port-based industrial activity. Although this Code does not deal with the port area industrial activity, port administrations are often the receivers of air-related complaints (e.g. dust, odours) from the local community. The public perception about the responsibility of the port administrations can cause increased public pressure on port-related projects, accompanied by delays and increased expenditures for the port administrations.



The Directive 96/62/EC on the Ambient Air Quality Assessment and Management sets the basic principles of the EU air quality strategy and is accompanied by Daughter Directives that set the numerical limit or target values for a range of air pollutants. Targeting the sources of air pollutants, the Directive 94/63/EC controls the Volatile Organic Compound (VOC) emissions resulting from the storage of petrol in terminals and its distribution from terminals to service stations, the Integrated Pollution Prevention and Control (IPPC) Directive 96/61/EC controls the emissions from a wide range of industrial installations, the Directive 2000/76/EC sets operational conditions and technical requirements for Waste Incineration Plants, and Directive 2001/80/EC controls the air emissions from Large Combustion Plants.

*ii) Recommended guidelines*

Port administrations are recommended to:

- Take the appropriate measures in order to comply with the emission limit values that apply for any installations that they own and operate;
- Nominate representatives for communication with and control of their tenants;
- Engage in dialogue with the local community in order to facilitate better understanding of the role of port administrations;
- Inform themselves on how companies in the port area apply the provisions of the Directive on the Control of Volatile Organic Compounds (VOCs) from the storage of petrol and its distribution from terminals to service stations; and
- Monitor the port area for early identification of air quality problems.

## 8. Monitoring the Port Environment and Reporting

*i) The issue and the rules*

Whilst recognising that specific responsibility for monitoring within a port area will vary from port to port and from member state to member state, monitoring can be of particular importance to help port administrations to foresee, anticipate and avoid environmental damage liabilities under the forthcoming Environmental Liability Directive as well as damage to their sites from the activities of their tenants. In this context, it would be useful for port administrations to make an assessment of the environmental risks in the port area.

Directive 2003/04 EC on “public access to environmental information” obliges port administrations to possess and update environmental information relevant to their activities and make, on their own initiative, such information available on electronic databases that are publicly and easily accessible. The European Commission also adopted a Recommendation (2001/453/EC) on the “recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies”, with which port administrations have to comply. The ESPO Environmental Review in 2001 went one step further by recommending that port administrations should produce a publicly available annual environmental review (report). ESPO encourages the use of the Port Environmental Review System (PERS) developed by the ECOPORTS project as it can assist port administrations in the preparation of their environmental report.

*ii) Recommended guidelines*

Port administrations are recommended to:

- Identify environmental performance indicators relevant to their major environmental issues in order to facilitate monitoring of their environmental performance;
- Establish monitoring which is geared towards obtaining information relevant to the chosen environmental performance indicators;
- Produce a publicly available annual environmental report;
- Use PERS as a tool to compile the minimum information needed to produce the environmental report.

## 9. Port Preparedness and Contingency Plans

*i) The issue and the rules*

Although monitoring establishes a 'proactive' approach, as it helps port administrations identify problems at an early stage, the 'reactive' approach is also very important to assist port administrations in minimizing the financial and environmental risk of accidents when they happen. It should be acknowledged that, in the case of contingency plans, port administrations need to act in association with other relevant national and local emergency authorities and in accordance with national and international regulations.

The IMO International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC) requires member states to establish measures for dealing with oil pollution incidents, either nationally or in co-operation with other countries. In 2000, the parties of the OPRC convention adopted a protocol on Preparedness, Response and Co-operation to pollution incidents by Hazardous and Noxious Substances (HNS Protocol). The method by which these contingency plans are prepared and operated varies quite considerably between member states.

*ii) Recommended guidelines*

The port administrations are recommended to:

- Cooperate with the relevant national and local authorities on the preparation of contingency plans for the port area;
- Have good knowledge of the existing contingency plans;
- Communicate internally this knowledge;
- Assist in the coordination of contingency plans in case of an accident in the port area.

## B – SHIP/PORT INTERFACE

Port administrations may or may not be involved in cargo handling activities. In any case, they stimulate environmentally friendly activities related to the ship/shore interface.

### 1. Ship Waste Management

#### *i) The issue and the rules*

Ships that are calling at ports may need to dispose of a variety of wastes produced during their journey. The MARPOL Convention 73/78 by the International Maritime Organisation requires ports to have adequate and sufficient facilities for each type of waste that ships carry. The EU Directive 2000/59/EC goes one step further by addressing in detail the legal, financial and practical responsibilities of the different operators involved in the delivery of ship generated waste and cargo residues in European ports. Although International and European legislation create a general legal framework, it should be acknowledged that important variations can be observed in the national legislation of the member states. Notably, Baltic countries are faced with specific rules resulting from the HELCOM Strategy.

#### *ii) Recommended guidelines*

In order to provide guidance on the provision of MARPOL 73/78 for waste facilities, the IMO published in 1995 and updated in 1999 a 'Comprehensive Manual on Port Reception Facilities'. In compliance with the provisions of the EU Directive 2000/59, ESPO prepared, in 2000, guidelines to assist port administrations in preparing plans for the reception of ship-generated waste. In drawing these waste management plans, port administrations are recommended to:

- Consult with interested parties;
- Analyse the amounts and types of waste generated by ships using the ports;
- Consider the type and capacity of facilities required;
- Consider the location and ease of use of the facilities;
- Ensure that the cost recovery systems for using port reception facilities provide no incentive for ships to discharge their waste into the sea;
- Ensure that effective publicity is given to the facilities;
- Submit a written plan to the competent authority;
- Review the planning process regularly.

### 2. Cargo Handling

#### *i) The issue and the rules*

Cargo handling can have environmental implications both inside and outside the port area; these include dust, odours, atmospheric pollution, water and soil contamination, increased noise levels etc. Although cargo handling may or may not be the responsibility of the port administration, these environmental implications have a negative effect on the activities of the port administration: soil contamination reduces the value of its assets; water contamination can lead to increased levels of contaminants in the dredged material and subsequent increased costs for its treatment and disposal; dust, odours and noise increase the number of complaints and pressure from the local community.

The Air Quality Framework Directive with related Daughter Directives, the Directive on the Control of Volatile Organic Compounds resulting from the storage of petrol and its distribution from terminals to service stations, the Water Framework Directive, the Directive on the Assessment and Management of Environmental Noise, the Directive on Noise Emission by Equipment for Use Outdoors and the Seveso II Directive set the European policy background with which port activities must comply, together with the relevant national and local regulations.

*ii) Recommended guidelines*

In case port administrations are involved in cargo handling activities, they are recommended to:

- Seek constant improvement of cargo handling procedures, using Best Available Techniques that do not entail excessive costs;
- Carry out appropriate maintenance and periodic inspection of equipment and facilities used for cargo handling;
- Minimise practices creating nuisance for neighbouring population;
- Be aware of and conform with the environmental regulations and their related responsibilities.

Port administrations are also recommended to encourage those responsible for cargo handling to follow the same lines.

### 3. Hazardous Cargo

*i) The issue and the rules*

Hazardous cargo poses a special danger to the surrounding environment and community. The volume of dangerous and polluting goods carried by sea is increasing and will continue to increase. The EU White Paper on the “European transport policy for 2010” called for intermodality, stressing the advantages of short sea shipping.

The principal instrument is the International Convention for the Safety of Life at Sea (SOLAS), 1974 as amended which specifies the minimum standards for the construction, equipment and operation of ships, compatible with their safety. Directive 2002/59/EC establishing a Community vessel traffic monitoring and information system (part of the ERIKA II package) repeals Council Directive 93/75/EEC (HAZMAT) and sets, among others, the requirements for the notification of dangerous and polluting goods carried on board ships.

The Codes prescribed in SOLAS and the EU Directive 2002/59/EC are recognized as the minimum standards for the safe transport of dangerous and polluting goods by sea, but because ports are closely linked they are also taken as the standards for port operations. The IMO has adopted amendments to chapter VII of SOLAS to make the provisions of the International Maritime Dangerous Goods (IMDG) Code mandatory under the convention as from 1 January 2004. Contracting Governments may apply the IMDG Code on a voluntary basis as from 1 January 2003.

The new version of the IMDG Code (2002 edition or Amendment 31-02) is now aligned with the United Nations model regulations for all modes of transport. Correct packing and documentation for consignments of dangerous goods are essential, so that those engaged in the transport and handling of such are not exposed to risk. For this reason, it is important that, from the land side operations, personnel engaged in the packing of dangerous goods and the preparation of documentation should be competent to perform these tasks.

Recognizing the need to harmonize rules applied within the port area with rules applicable to ships, IMO published a set of “Recommendations on the Safe Transport of Dangerous Goods in Port Areas.” The publication was first circulated in 1973 and revised on various occasions. The latest (1995) edition also contains guidance for the implementation of these recommendations by those Member States, which are undertaking the regulation of transport of dangerous goods and related activities in their ports. The Recommendations have been aligned as closely as possible with relevant IMO Codes, and with the IMDG Code in particular. It is considered essential to harmonize the rules applied within the port area with the rules that are applicable to the ship in order to ensure smooth operations and to avoid misunderstandings between ship and shore. The Recommendations also include a new element, cargo interests. This refers to the many and various organisations, which can be involved with dangerous cargoes before they arrive at a port, such as shippers, packers, those concerned with documentation, consolidators and forwarding agents.

In 1996 the fourth edition of the International Safety Guide for Oil Tankers & Terminals (ISGOTT), was produced jointly by the International Chamber of Shipping (ICS), the Oil Companies International Marine Forum (OCIMF), and the International Association of Ports and Harbours (IAPH). This is considered as the standard reference work on the safe operation of oil tankers and terminals. OCIMF has also published the second edition (1993) of a Safety Guide for Terminals Handling Ships Carrying Liquefied Gases in Bulk. This guide is primarily intended for use by LPG Terminals, but it is also applicable for use by terminals handling LNG and liquefied gases.

#### *ii) Recommended guidelines*

The role of port administrations to reduce the risks posed by hazardous cargo relates, as acknowledged by directive 2002/59, to the collection of the information notified by the ship when entering the port.

Port administrations are therefore recommended:

- To set up electronic information systems in order to receive and process the data in an optimal way;
- To exchange best practices in order to ensure a uniform approach on information gathering.

## C - MARITIME AREA

The port administration does not have a direct responsibility with respect to shipping activities outside the port area. However, it is, together with the shipping industry, a key actor in the maritime transport sector. The port industry keeps an open mind for cooperation.

### 1. Maritime Safety

Several maritime accidents off the EU coasts (Erika, Prestige) highlighted the urgent need to strengthen European rules concerning the safety of maritime transport and the prevention of sea pollution. The Commission responded to these safety concerns by publishing the Erika I and II packages, which were adopted by the EU institutions with uncommon speed. The need for an accelerated implementation of these rules has been acknowledged and the Commission will pursue its efforts to improve safety at sea by proposing further measures.

Although the above-mentioned measures do not address ports directly, port administrations can also contribute to improve the safety of navigation and the prevention of pollution in EU waters. This is acknowledged by Directive 2002/59 establishing a Community monitoring, control and information system for maritime traffic which:

- imposes some obligations on ports in relation to the collection of information on the ship and its cargo in order to better monitor the traffic;
- highlights the responsibilities of port authorities vis-à-vis ships in case of bad weather conditions, i.e. either prevent ships (especially sub-standard ones) to sail or accommodate them if they are in distress.

Providing refuge to a ship in need of assistance may avoid pollution. However, as provided in Directive 2002/59, the decision to accommodate a ship in distress requires a balanced approach. A realistic assessment must be made of the risks involved, either in refusing port access in order to keep the pollution or explosion away from the coast or in requiring a ship in a precarious condition to head for a port in order to keep the ship and its crew safe and to avoid sea pollution.

Port administrations should:

- have the possibility to refuse access to a ship in distress if the accommodation of this vessel would endanger the safety of the port, its wider community, environment and economy;
- be able to rely on a clear chain of command to deal with incidents;
- be able to count on prompt compensation of the costs and the potential damage resulting from this operation.

## 2. Ship Emissions

MARPOL Annex VI sets regulations for the prevention of air pollution from ships, including designating special SO<sub>x</sub> Emission Control Areas in the Baltic, the North Sea and the English Channel. As it is not yet into force and its provisions are not sufficiently stringent, the European Commission decided to go a step further by proposing a strategy to reduce air pollutant emissions (sulphur oxides, nitrogen oxides and volatile organic compounds) from the maritime sector, as well as an accompanying measure aimed to reduce the sulphur content in marine fuel oil.

ESPO supports the principle of reducing the harmful effects from ship emissions. However, the category which should be targeted to improve the quality of air emissions from the maritime sector should be the responsible polluter, according to the polluter pays principle, and not the port sector, which does not have control over ship emissions.

Some ports have developed good practices to facilitate low-emission shipping in ports, for example by using differential charging to encourage new combustion techniques and lower sulphur content in bunker oils.

ESPO sees the introduction of differential charging as a decision of individual ports based on their own circumstances and opposes any initiative imposing such a practice on a European wide basis.

## SECTION II – PORTS AND ENVIRONMENTAL MANAGEMENT

The environmental role of port administrations depends on national laws. In certain cases national legislation already foresees environmental requirements for concessionaires and/or port users. Environmental duties are also given to public authorities or administrations different from port administrations.

Taking into account their individual circumstances and requirements, port administrations are recommended to use the Environmental Management Information System (EMIS) developed by the ECOPORTS Foundation on behalf of the port industry; this is an important step towards self-regulation.

The EMIS tools<sup>1</sup> consist of:

### 1. Environmental Audit

The Self Diagnosis Methodology (SDM) is an environmental self-audit.

It can be used to establish exactly the position and status of a port's environmental management programme for the initial development and implementation of an Environmental Management System, and/or as a periodic auditing tool to establish performance over time, either against the port's own baseline or in relation to European benchmarks.

### 2. Environmental Review

The Port Environmental Review System (PERS) has been developed specifically for ports. PERS defines a standard of good practice for reviewing and reporting significant aspects of a port's environmental management.

It may be considered as a first step in a phased programme to implement an Environmental Management System. PERS includes the option of a voluntary application for a Certificate of Verification by an independent auditor.

### 3. Environmental Management System

This is a standard Environmental Management Scheme which can be applied in port communities all around Europe. The main focus is on environmental relationships within the port community, i.e. the port authority, the industrial facilities located within the port area and companies exploiting the port's terminals.

It also consists of an integrated environmental port area management module, bringing together those information streams that can help to strengthen the effects of environmental management on both port administrations and operators. It can also be of assistance in environmental improvement programmes, notably by monitoring and measuring the results of these programmes by using standard environmental indicators.

(1) The environmental audit and review – 1 and 2 – were already available at the time of writing the Code; the environmental management system, the decision support system, the port visitor internet tool and the improvement program – 3, 4, 5 and 6 – will be finalised by the end of the ECOPORTS project, i.e. by 2005.

## 4. Decision Support System

The Decision Support System (DSS) is an Information Communication Technology (ICT) tool to allow port managers to scan different environmental solutions and opportunities whilst planning the management or improvement of activities within the port. It pools together European port environmental knowledge to enable port managers to make evidence-based decisions.

The knowledge base for these decisions comes from two sources: a database of solutions based on information of best practices from the port sector and surveys of tools, devices and measures that have potential for application in European port environmental management.

## 5. Port Visitor Internet Tool

A Port Visitor Internet tool is aimed at supplying information online to professional port visitors. The data provided will be adapted to each port.

This tool will enable its users to have access to relevant environmental information and requirements, with which they have to comply within the port area, without having to visit the port.

## 6. Improvement programme

An improvement programme will aim to:

- share best practice experience (through training sessions, European meetings)
- organise “ports assist ports” programmes in implementing best practices in port environmental issues.

A standard training scheme will be used in the context of workshops organized at a national level to provide education and training on environmental issues and on the use of EMIS tools for port administrations. ESPO members are recommended to participate in such workshops, because they will provide a certain basic and standard information level in all EU ports.

Although the Environmental Management Information System (EMIS) tools are established to provide a European standard for port environmental management, they are versatile enough to deal with the variety of port profiles and different levels of operational environmental management. Port administrations can choose the extent to which they implement the different elements of EMIS and they can add those elements which they find most useful to their existing systems. For certification of EMIS, more strict requirements are used.





# ANNEX

## LIBRARY OF ENVIRONMENTAL POLICY & GUIDELINES

The Annex to this Code of Practice is available on ESPO's website ([www.espo.be](http://www.espo.be)).

It provides detailed information on the environmental regulations and recommendations mentioned in the Code, as well as the Internet links where they can be found in their official version.

Because this library of Environmental policy and guidelines is available on line, it will be up-dated regularly according to the legislative developments.

## EUROPEAN SEA PORTS ORGANISATION

The European Sea Ports Organisation (ESPO) was founded in 1993 in response to a growing demand for common views and opinions of the seaport sector to serve the interests of ports with regard to the development of the European Community, the single market and its common transport policy. The organisation represents the port authorities and port associations of the seaports of the European Union, Norway, Iceland and accession countries to the EU.

ESPO's mission is to influence public policy in the EU to achieve a safe, efficient and environmentally sustainable European port sector, operating as a key element of a transport industry where free and undistorted market conditions prevail, as far as practicable.

ESPO's key objectives are:

- To ensure that the economic importance of European ports is recognised in the EU and its Member States and that the sector is consulted substantively on any measure likely to affect it;
- To promote free and fair competition in the port sector;
- To ensure that European ports play their full part in delivering economic efficiency;
- To promote the highest possible safety standards in European ports;
- To encourage ports to be proactive in protecting the environment.

The Environment Committee of ESPO is entrusted with port related environmental questions. It prepared the 1994 Code of Practice and the 2001 Environmental Review, as well as this new Code. The ESPO Marine Committee also looks at environmental issues, but rather in the perspective of the shipping side.

For further information about the Organisation, please contact:

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## ECOPORTS FOUNDATION

The ECOPORTS Foundation (EPF) is a non-profit organisation established in 2000. It is a network platform where European port administrations exchange environmental experience. Knowledge from the ECOPORTS Foundation is brought in the ESPO Environment Committee to discuss policy-making and implementation.

The ECOPORTS Foundation develops voluntary projects in the field of exchange of experience, such as the ECOPORTS project, and promotes best environmental practice. EPF will disseminate the results of the ECOPORTS Project and will facilitate the participation of as many European port administrations as possible.

For further information on the ECOPORTS Foundation please contact:

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