

EN

EN

EN

ANNEX

BACKGROUND PAPER No. 6

ON

MARITIME SAFETY AND SECURITY

Disclaimer:

The present document has been elaborated by European Commission services for the purpose of providing background material and information to supplement the Green Paper on Maritime Policy (COM ... 2006).

This background document is therefore purely illustrative and is not intended to represent the political views, nor to indicate or announce possible future initiatives of the European Commission.

TABLE OF CONTENTS

PAPER No. 6 ON MARITIME SAFETY AND SECURITY	1
1. INTRODUCTION	4
2. SCOPE	4
3. MARITIME SAFETY AND MARITIME SECURITY	5
3.1. Vessel Safety and Environmental Safety	5
3.1.1. Background	5
3.1.2. Maritime safety in general	8
3.1.3. Maritime safety and competitiveness of the maritime industries.....	9
3.1.4. Environmental safety measures.....	9
3.1.5. World-wide recent developments in the combined field of Maritime and Environmental safety.....	11
3.1.5.1. Ballast water	11
3.1.5.2. Hazardous and noxious cargo.....	11
3.1.5.3. Bunker Oil Damage	12
3.1.5.4. Harmful anti-fouling systems on ships.....	12
3.1.5.5. Shipbreaking	13
3.1.5.6. Air-Pollution from seagoing ships – Engine Emissions	15
3.1.5.7. Reliable Inspection and Repair, safety of life on board	16
3.1.6. Use of risk assessment for developing and implementing safety policies	17
3.1.6.1. Better reporting and analysis will yield substantial benefits	17
3.1.6.2. Analysis of oil spills.....	19
3.1.6.3. Analysis of future trends	20
3.1.7. Contributions from research	20
3.1.8. Enforcement issues	20
3.2. Maritime Security	22
3.2.1. Policy	22
3.2.2. Risks associated with traded goods	23

3.2.3.	Risk assessment: International Ship and Port Facility Security Code and information on traffic patterns	24
3.2.4.	Compliance monitoring	25
3.3.	Actions that could be considered under the Green Paper	25
4.	ISSUES AFFECTING SECURITY IN THE MARITIME AREA	29
4.1.	The challenges	29
4.1.1.	Illegal immigration by sea	29
4.1.2.	Smuggling and drug trafficking	29
4.1.3.	Terrorism.....	30
4.1.4.	Piracy and armed robbery at sea	30
4.2.	Military contribution to security-related government activities	31
4.3.	Actions that could be considered under the Green Paper	32

ANNEX 1

ANNEX 2

ANNEX 3

1. INTRODUCTION

This paper was produced by Commissioner services as part of the preparations for a Green Paper on an EU maritime Policy. It serves as a background document to the Green Paper, with the aim to detail further some aspects raised in it, and to provide complementary background information for it. The present document specifically deals with maritime safety and security. Other background documents on relevant matters, such as maritime surveillance, UNCLOS-related issues and other environmental subjects, can be found at the following weblink: <http://ec.europa.eu/maritimeaffairs>

2. SCOPE

Maritime safety and maritime security are two important parameters for Europe's future. They should not be regarded solely as statically protective, as they require a dynamic engagement with evolving challenges and therefore require adaptive responses based on the best available knowledge and technologies. European citizens and economic interests may expect their authorities to take up these challenges in their interest.

The present paper constitutes a contribution that sets out ideas on how this can be achieved. In this context, it covers:

- Maritime safety including:
 - Vessel safety (e.g. all aspects of maritime safety - prevention of accidents, safety of personnel etc);
 - Environmental safety (prevention measures and response/crisis management related to pollution from ships);
 - Maritime security (protection of shipping and port facilities).
- Security related issues affecting the maritime area including:
 - Border control/immigration;
 - Organised crime/smuggling/trafficking;
 - Terrorism;
 - Piracy.

A European Marine Strategy, one of several thematic strategies under the 6th Environmental Action Programme, was adopted by the European Commission on 24 October 2005¹; the Strategy will directly contribute to the work on the future EU Maritime Policy. This document does not cover all environmental issues to be addressed under the

¹ COM(2005) 505 final of 24.10.2005

European Marine Strategy, but highlights mainly those resulting from maritime transport activities.

In addition, a 3rd Maritime Safety Package² has been proposed by the Commission (see section 3.1.2) with the aim to improve the prevention of accidents and pollution and to better deal with the aftermath of accidents and to create a level playing field for quality minded operators. With this package the Commission is following a proactive approach to maritime safety. Whilst the previous packages were “accident” driven this 3rd package assessed on the basis of the experience gained the existing legislation and identified those areas which at this stage were not considered at EU level. This resulted in amendments to 3 main Directives and 4 new proposals addressing flag State responsibilities and liability issues³. Also here, only the main facets of these policy measures are presented in this paper.

Certain themes, such as risk assessment, monitoring and research are relevant to all issues.

An effective maritime safety and security policy requires better assessment of which ports, vessels and maritime routes are currently most vulnerable, whether the risks are increasing, what the potential damage of different traffic patterns might be and how ports and shipowners are complying with safety and security legislation. Over the last three European Research Programmes, considerable maritime RTD effort was devoted to maritime safety and environment protection. Results from these research projects contributed to better understanding the cause of accidents, established guidelines for emergency response and pollution prevention and control as well as provided technical solutions for advanced safer vessels. Recently maritime security has also been included in the research programmes of the EU.

Also, this paper summarises ongoing efforts in risk assessment and research for maritime safety and security and suggests where further improvements are needed to improve both European legislation and the effectiveness with which the EU can negotiate on the international stage. Suggestions how these improvements might be achieved are addressed in the following chapters.

3. MARITIME SAFETY AND MARITIME SECURITY

3.1. Vessel Safety and Environmental Safety

3.1.1. Background

The strategic, political and economic importance of shipping to the EU economy and the particular geographical situation in the EU dictate our view and policy line on maritime safety.

Under the common denominator “maritime safety” the working group understands:

- the safety of the ship, its crew and its passengers, and/or cargo;

² COM(2005) 585 final and SEC(2005) 1496 of 23.11.2005 , together with 7 specific proposals.

³ http://ec.europa.eu/transport/maritime/safety/index_en.htm

- the safety of navigation;
- the prevention of pollution from ships, including the possibility for sanctioning illicit pollution and intervention to limit damage of incidents;
- liability and compensation for damages occurred by ships.

In conformity with the EU Treaty the maritime safety objectives aim to ensure within the internal market the highest possible degree of maritime safety and to adequately protect our coasts, as well as the marine and air environment in the European area.

Shipping is a global industry. Consequently, safety and environmental standards affecting international shipping, should, preferably and wherever possible, be developed at the level of the International Maritime Organization (IMO) and the International Labour Organization (ILO), and/or conform to the principles laid down in the United Nations Convention on the Law of the Sea (UNCLOS)⁴. However, EU-owned vessels, whether or not they are EU-flagged should aim to anticipate future rules and aspire to more stringent standards than the legal minimum.

However, despite the fact that the Community is a contracting party to UNCLOS, no possibility has been created under IMO Conventions and Protocols for ratification or accession by the European Community⁵ and that they consequently only commit individual Member States.

From the list of Conventions⁶ it also appears that several important Conventions and Protocols have not yet entered into force. Nevertheless, it should be kept in mind that the tacit acceptance procedure for the adoption of amendments of technical Annexes the main IMO Conventions and Protocols (SOLAS, MARPOL, etc) has demonstrated its effectiveness, whenever applied, and in this respect it constitutes a good practice that should be followed in the future. In accordance with the above mentioned principles, regulatory actions (Regulations, Directives and Decisions) or proposals for such instruments, further called measures, at EU level can be grouped within five categories:

- (1) Measures on issues for which at world-wide level no rules have been established, due to the fact that neither the IMO nor the ILO have competence, or because they have explicitly refrained to do so, or referred to the regional level for legislating⁷.
- (2) Measures to ensure a timely and effective implementation of internationally agreed decisions⁸.

⁴ UNCLOS related issues are addressed in the background paper No. 3 on Exclusive Economic Zones, underwater resources (including fisheries resources, continental shelves, law of the sea).

⁵ Apart from the 2002 Protocol to the Athens Convention relating to the Carriage of Passengers and their Luggage by Sea (PAL), 1974, where a special clause (see Annex 2) was adopted to this end.

⁶ See background paper - Multilateral and EC instruments related with the seas and the oceans (<http://ec.europa.eu/maritimeaffairs>)

⁷ Examples: Directive 97/70/EC of 11 December 1997 setting up a harmonised safety regime for fishing vessels of 24 metres in length and over, Directive 98/18/EC of 17 March 1998 on safety rules and standards for passenger ships.

⁸ Examples: Regulation (EC) No 3051/95 of 8 December 1995 on the safety management of roll-on/roll-off passenger ferries (ro-ro ferries), and Regulation (EC) N° 789/2004 of 21 April 2004 on the transfer of cargo

- (3) Measures to ensure an effective implementation of the international rules affecting the shipping industry. This is necessary in order to create a level playing field and to avoid discrimination resulting from the possibility, given to each individual contracting State under the IMO and ILO conventions, to exempt or derogate under well defined conditions from the basic rules, and from the fact that several important provisions are intentionally left to the discretion of the national Administrations. When legislating on these measures due account is taken of non-mandatory resolutions addressing issues related to the basic conventional rules⁹.
- (4) Measures stemming from an assessment of the adequacy of the legislative framework, existing at international and EU level. Whenever EU legislation anticipates the adoption of similar legislation at international level, a possibility for updating this legislation in view of aligning it to the international rules is foreseen (comitology)¹⁰.
- (5) Measures intended to improve the existing regulatory international framework or to introduce new rules at this level¹¹.

It must consequently be stressed that maritime safety related legislation aims to bring added value to the international framework (IMO conventions) and to overcome the main weakness of the IMO regime, which is, at least for the time being, the lack of any enforcement and control mechanism of the adopted rules. Some improvement might result from the implementation by the IMO of the Voluntary IMO Member States Audit Scheme (VIMSAS)¹². Under the 3rd Maritime safety Package¹³ the Commission proposed to render this audit mandatory for the 25 EU Member States. This policy line should in the medium term result in mandatory audits for all IMO contracting parties.

For both the preparation and implementation of the maritime safety related legislation the Commission can rely upon the European Maritime Safety Agency (EMSA). This Agency was set up by a Regulation in 2002¹⁴ in the aftermath of the *Erika* and *Prestige* accidents, with its objectives and tasks laid down in that instrument.

The Agency is an independent body whose main role is to assist the Commission by providing technical support in developing and enforcing Community legislation related to maritime safety, ship pollution prevention.

and passenger ships between registers within the Community and repealing Council Regulation (EEC) No 613/91

⁹ Most of the Directives listed in Annex 1 have provisions making IMO Resolutions mandatory. Some Directives, as Directive 95/21/EC on port State control and Directive 94/57/EC on common rules and standards for ship inspection and survey organisations are entirely built upon the non mandatory IMO Resolutions

¹⁰ Example: Regulation (EC) No 417/2002 of the European parliament and of the Council of 18 February 2002 on the accelerated phasing-in of double hull or equivalent design requirements for single hull oil tankers .

¹¹ In this context, the Commission took the initiative to follow with the assistance of EMSA a pro-active policy with regard to the safety of double hull tankers.

¹² Voluntary IMO Member State Audit Scheme, adopted by the IMO Assembly on 1 December 2005.

¹³ Proposal for a Directive of the European Parliament and of the Council on compliance with flag State requirements - COM(2005) 586 final.

¹⁴ Regulation (EC) No 1406/2002 of 27 June 2002 establishing a European Maritime Safety Agency.

In 2004, the scope of this Regulation was extended to maritime security and tasks have been assigned to the Agency in the field of oil pollution response. The Agency is required to provide Member States and the Commission with technical and scientific assistance in the field of accidental or deliberate marine pollution by ships and to support, on request, with additional means in a cost-efficient way, the pollution response mechanisms of Member States. These additional means (i.e. stand-by contracted vessels) shall be channelled via the Community Civil Protection Mechanism.

The RTD Framework Programmes provide support for research at European level, and have supported projects contributing to safety and security policies. In addition, maritime security research will soon be introduced in the 7th European framework programme.

3.1.2. *Maritime safety in general*

All initiatives and required measures have been, at this stage, adequately addressed within the following Communications, accompanied with relevant legislative proposals:

- (a) Basic and initial Communication: "A Common Policy on Safe Seas"¹⁵,
- (b) Erika Communications:
 - "The safety of the seaborne oil trade"¹⁶,
 - "Second set of Community measures on maritime safety following the sinking of the oil tanker Erika"¹⁷,
- (c) The passenger ship Communication: "Enhanced safety of passenger ships in the Community"¹⁸,
- (d) The Prestige Communication: "Improving safety at sea in response to the Prestige accident"¹⁹.
- (e) The 3rd Maritime Safety Package Communication.

Also, additional information and comments related to the five categories of measures mentioned above have been addressed within the Commission's White Paper "European transport policy for 2010: time to decide"²⁰.

As a result of these Communications and of a few additional proposals addressing specific maritime safety issues, not less than 27 distinct Regulations, Directives and Decisions have been adopted²¹. An inventory of them is provided in annex 2.

¹⁵ COM(93) 66 final of 24.2.1993

¹⁶ COM(2000) 142 final of 21.3.2000

¹⁷ COM(2000) 802 final of 6.12.2000

¹⁸ COM(2002) 158 final of 25.03.2002

¹⁹ COM(2002) 681 final of 20/12/2002

²⁰ COM(2001) 370 final of 12.9.2001

²¹ Three new Directives and one new Regulation are part of the 3rd Maritime Safety Package.

As a result of the international decision making process and of a regular assessment of the existing legislative situation, new maritime safety related initiatives, if necessary, will be developed.

3.1.3. *Maritime safety and competitiveness of the maritime industries*

New global regulation on ship safety fosters a demand for new technologies and can create new market opportunities for the EU's world class shipbuilding and marine equipment industries. Almost all innovations in these sectors come from European yards and equipment manufacturers, and any initiatives that lead to increased opportunities for more ecological or efficient vessels should reward high quality European shipbuilders and manufacturers.

This trend towards quality shipping is supported by industry's own efforts to continue to develop innovative solutions to safety and other challenges, which have been recognised in the current framework on state aid for innovation and taken into account in the elaboration of a strategic research agenda for the sector.

Moreover, any initiatives to assess and quantify the risks of accidents must take due account of the pivotal importance of the ships in addition to looking at the record of flag states, classification societies etc.

To that effect, a quality assessment scheme for shipyards at world-wide level should form an essential part of a future maritime policy. Such a scheme would allow the authorities to factor in the quality of the original build or repair into risk assessment schemes and better apply new safety measures such as the proposed revised provisions on port state control.

3.1.4. *Environmental safety measures*

Prevention aspects and governance in the Marine Strategy

The deteriorating state of the marine environment and an inadequate institutional framework for the management of the seas have led the European Commission to publish in October 2005 a European Marine Strategy that provides a basis for improving coherent marine environmental protection measures for European Community waters.

The Marine Strategy aims at delivering the 'environmental safety prevention pillar' through the preservation of the functional integrity of the marine environment on which the sustainable wealth, productivity and employment opportunities derived from oceans and seas depend.

It intends also to provide the appropriate governance framework – i.e. management units (Marine Regions) and tools (regional Marine Strategies) – for effective protection of the EU marine environment. The Marine Strategy will not bring about the overall governance framework through which all uses and users of the oceans and seas can be regulated. Such regulation is essential as there are presently conflicting and competing uses of ocean resources and space that are managed through *ad hoc* arrangements, which puts the long term sustainability/productivity of oceans at risk. The comprehensive approach and governance for ocean management which is required cannot be developed through the Marine Strategy alone.

The preparedness for and response to marine pollution accidents

The Community framework for cooperation in the field of accidental or deliberate marine pollution, expiring at the end of 2006, provides funding for joined activities improving preparedness, techniques, and methods of response to marine pollution accidents. Preparedness actions are aimed at ensuring an optimal response when an emergency occurs. The investment made in recent years in training, exercises, and preparedness has helped to ensure an effective mobilisation during the response. Moreover, the European Commission implements the framework for cooperation via a Community Information System (CIS) with the purpose of exchanging data on the preparedness for and response to marine pollution.

The Community Civil Protection Mechanism is the operational instrument aimed at mobilising assistance from the Member States and partner countries in response to disasters, including major accidents at sea. The general purpose of the Mechanism is, on request, to provide support in the event of an emergency and to facilitate improved co-ordination of assistance intervention provided by the Member States and the Community. The Community Mechanism for civil protection allows to respond to any major disaster inside and outside the EU by coordinating requests and offers for assistance between 30 participating states: the EU 25, the three European Economic Area (EEA) countries Norway, Iceland and Liechtenstein plus Bulgaria and Romania. In past accidents such as the *Prestige*, the Monitoring and Information Centre of the European Commission (MIC) was able to respond immediately to request for assistance from the Spanish and French authorities, facilitating the provision of specialised vessels, floating barriers, and surveillance planes.

The Communication “Improving the Community Civil Protection Mechanism”²² sets out policy proposals for enhancing the Mechanism and the response to emergencies. These proposals require a new legal basis. Some of them would be particularly relevant for marine pollution, such as:

- the MIC shall have a more pro-active approach and a mandate to inform third countries of the possibilities of requesting assistance;
- there should be a possibility to hire equipment that cannot be obtained from the Member States;
- international coordination shall be promoted.

As mentioned under section 3.1.1, the European Maritime Safety Agency (EMSA) provides additional support to the civil protection mechanism and the Member States capacities for pollution response.

²²

COM(2005) 137 final of 20 April 2005

3.1.5. World-wide recent developments in the combined field of Maritime and Environmental safety

3.1.5.1. Ballast water

The problem of harmful aquatic organisms in ballast water first arose in the early 1980s and has been dealing with the issues, focusing in the past decade since to develop a new Convention at international level.

The increasing problem of invasive species is largely due to the expanded trade and traffic volume over the last few decades. There are few areas that have not been affected to some extent²³

The volume of seaborne trade continues overall to increase and the problem may not yet have reached it peak. A well-known European example is the introduction of the American comb jelly (*Mnemiopsis leidyi*) to the Black and Azov Seas, causing the near extinction of anchovy and sprat fisheries. The voracious zooplanktonic predator reached enormous biomass levels of over 800 million tons (at least 1000 times more than total fish landings) in the Black Sea. Elsewhere in Europe, alien marine species are also known to have negatively affected the local biodiversity.

Whilst the damage caused by individual introductions is well documented, the rate at which new species appear in European waters, the volume and origin of ballast water discharged each year, and the ports of departure posing the greatest risk are unknown. The International Convention for the Control and Management of Ship's Ballast Water and Sediments (BWM Convention) adopted on 13 February 2004²⁴ represents a sound precautionary approach but further research is needed into these issues.

The European Commission contributes to the efforts of IMO in implementing the GEF/UNDP/IMO Global Ballast Water Management Programme, towards helping developing countries understand the problem, monitor the situation and prepare for the Convention. Examples are FP5 research projects TREBAWA and MARTOB which address the issue of treatment of ballast water by focusing on the development of a new technically and economically competitive ballast water treatment system to be employed onboard ship. The TREBAWA system consists of a primary (hydrocyclone) pre-treatment phase together with a secondary integrated UV system to prevent micro-organisms transport by disinfection of the ballast water.

3.1.5.2. Hazardous and noxious cargo

The Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000 (HNS Protocol) follows the principles of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC) and was formally adopted by all EU Member States.

²³ See IMO poster at: http://globallast.imo.org/poster4_english.pdf

²⁴ This Convention will enter into force after ratification by 30 States, representing at least 35% of world merchant shipping tonnage. According to IMO data, as at 28 February 2006, 6 Contracting States representing 0.62% of the world tonnage have ratified the Convention.

The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention), when it enters into force²⁵, will ensure that ships carrying hazardous and noxious substances are covered, or will be covered, by regimes similar to those already in existence for oil incidents.

At the time being, only a few European Member States have ratified the OPRC-HNS Protocol and the HNS Convention²⁶. This means that, still now, there is no coverage for marine pollution damage caused by chemical substances. The EC should therefore strongly reiterate the need for the EU Member States to urgently ratify these instruments.

3.1.5.3. Bunker Oil Damage

Damage caused outside the ship by contamination resulting from the escape or discharge of bunker oil from ship can produce serious environmental impact at sea and on the coast.

The Convention on Civil Liability for Bunker Oil Pollution Damage (2001, not yet in force²⁷) was adopted to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spill of oil, when carried as fuel in ships' bunker.

The Convention applies to damage caused on the territory, including the territorial sea, and in exclusive economic zone of States Parties.

At the time being, only a few European Member States have ratified this Convention²⁸. The European Community should therefore strongly reiterate the need for the EU Member States to urgently ratify this Convention.

3.1.5.4. Harmful anti-fouling systems on ships

Anti-fouling paints are used to coat the bottoms of ships to prevent sealife such as algae and molluscs attaching themselves to the hull – thereby slowing down the ship and increasing fuel consumption.

These compounds slowly "leach" into the sea water, killing barnacles and other marine life that have attached to the ship. Studies have shown that these compounds persist in the water, killing sealife, harming the environment and possibly entering the food chain. One of the most effective anti-fouling paints, developed in the 1960s, contains the organotin tributyltin (TBT), which has been proven to cause deformations in oysters and sex changes

²⁵ The HNS Convention will enter into force twelve months after ratification by not less than fifteen States, which are States Party to the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC), 1990. According to IMO data, as at 28 February 2006, 8 Contracting States representing 4.83% of the world tonnage have ratified the Convention

²⁶ Despite Council Decision 2002/971/EC and several Council recommendations.

²⁷ The Convention will enter into force 12 months following the date on which 18 States, including five States each with ships whose combined GT (grosse tonnage) is not less than 1 million GT have either signed reservation as to ratification, acceptance or approval or have deposited instruments with the IMO Secretary-General. According to IMO data, as at 28 February 2006, 9 Contracting States representing 9.07% of the world tonnage have ratified the Convention.

²⁸ Despite Council Decision 2002/762/EC and several Council recommendations.

in whelks. To better protect the marine environment the International Maritime Organisation (IMO) developed a new instrument to prohibit the use of harmful organotins in anti-fouling paints. The International Convention on the Control of Harmful Anti-fouling Systems on Ships, adopted on 5 October 2001 will prohibit the use of harmful organotins in anti-fouling paints (at this stage limited to TBT) used on ships and establishes a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems. The convention will enter into force 12 months after 25 States representing 25% of the world's merchant shipping tonnage have ratified it. Unfortunately the threshold for the entry into force has not yet been reached so that the date of 1 January 2003 set for the prohibition of the use of TBT paints on ships has not been implemented by most of the IMO members. However the Convention contains a fixed date - 1 January 2008 - for the total prohibition of TBT on ships.

Having regard the dates mentioned in the Convention the Community through Regulation (EC) 782/2003²⁹ imposed on 1 April 2003 the prohibition of using TBT paint on ships flying the flag of an EU Member States and the prohibition of any TBT paint on ships, irrespective the flag they fly, entering EU ports by 1 January 2008. This means that the ships flying the flag of non EU Member States, which have not yet ratified the AFS-Convention today continue to sail with TBT on their hull. This situation is not only harmful for the marine environment, but places the EU ship owners in a less competitive position, than most of their competitors. If the ceiling for the entry into force of the Convention will not have been reached by 1 January 2007 the EU rules laid down in Regulation (EC) 782/2003 will apply to all ships, irrespective of their flag when visiting EU ports. These disadvantages would no longer occur if all the 25 EU Member States³⁰, which on their own have the key for the entry into force of the Convention in their hands, would ratify the AFS-Convention before 31/12/2006. The European Community should therefore strongly reiterate the need for the EU Member States to urgently ratify the AFS Convention.

3.1.5.5. Shipbreaking

According to the study "Oil Tanker Phase Out and the Ship Scrapping Industry" the dismantling of European sea vessels takes place today primarily in Bangladesh, India and Pakistan, and to a lesser degree in China and Turkey. In the South Asian countries ships are broken up by manual labour on open beaches without containment and waste disposal facilities. Apart from the lack of safety and health precautions for workers, the dismantling industry affects the environment by acute and long-term pollution of the sea, the ground and the air in a growing number of coastal areas that cannot be used any more for other purposes. The major part of the pollutants come from the large quantities of hazardous waste, such as oil sludge, asbestos and toxic paints, that are contained in end-of-life ships. It has, however, to be noted that the discussion whether the ship itself has to be considered waste is still on-going, and the international bodies involved have so far chosen a careful wording in this respect³¹.

²⁹ Regulation (EC) N° 782/2003 of the European Parliament and of the Council of 14 April 2003 on the prohibition of organotinic compounds on ships.

³⁰ On 31/3/2006 only 6 EU Member States have ratified the AFS Convention.

³¹ The Joint Working Group of the International Labour Organization, the International Maritime Organization and the Basel Convention on Ship Scrapping agreed in 2004 to recognise "*that many ships ... are known to*

The number of vessels being broken is bound to increase in coming years by the phasing out of single-hull oil tankers required by international law (MARPOL Convention, Annex I) as well as EC Regulations No. 417/2002³² and 1726/2003³³. The study "Oil Tanker Phase Out and the Ship Scrapping Industry" financed by the Commission for the European Parliament in June 2004 estimates that more than 2,000 oil tankers with a tonnage of about 130 million DWT will have to be withdrawn and sent for scrapping by 2015, which will mean a doubling or tripling of the usual scrapping volume per year.

The export of hazardous waste from the EU to non-OECD countries is banned according to the Waste Shipment Regulation³⁴. Under international law - the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989)- it is at least subject to notification procedures. However, these rules on waste shipment can rarely be enforced in practice, as there is under normal circumstances no clear point in time when a ship becomes waste and the owner may decide on the high seas to send his ship for scrapping. Also, as long as open registers exist, owners can change the legislation under which the ship operates, thus avoiding certain environmental regulations if the flag state has not signed up to them.

The IMO, the International Labour Organisation (ILO) and the Conference of the Parties to the Basel Convention have each drawn up technical guidelines on safe and environmentally sound ship recycling which, however, are not legally binding. In February 2005, a Joint Working Group on Ship Scrapping has been formed by the three organisations, in order to remove gaps and overlaps between the guidelines and coordinate activities in the field. After the IMO Assembly agreed in November-December 2005 that a new legally binding instrument on ship recycling should be developed, the Marine Environmental Protection Committee (MEPC) of the IMO has started work on a draft Convention on the Safe and Environmentally Sound Recycling of Ships, a proposal for which was submitted by Norway to MEPC 54 in March 2006. This draft contains rules on the design, construction, operation of ships as well as the environmentally sound operation of ship recycling facilities and the establishment of appropriate enforcement mechanisms, including certification and reporting requirements. The legal instrument is expected to be adopted in the biennium 2008/09 and enter into force some years later (although further clarification is needed on whether the IMO can extend its mandate to land-based activities).

The Council of the European Union, in its conclusions of 24 June 2005, has invited the IMO to establish mandatory requirements for a ship reporting system, that ensure an equivalent level of control as established under the Basel Convention, and to develop this reporting system within the shortest possible time period. The Commission, while strongly

contain hazardous materials and that such hazardous materials may become hazardous wastes as listed in the annexes to the Basel Convention." However, according to the Decision VII/26 of Basel Convention COP 7 "a ship may become waste as defined in Art. 2 of the Basel Convention and that at the same time it may be defined as a ship under other international rules".

³² Regulation (EC) No 417/2002 of 18 February 2002 on the accelerated phasing-in of double hull or equivalent design requirements for single hull oil tankers.

³³ Regulation (EC) No 1726/2003 of 22 July 2003 amending Regulation (EC) No 417/2002 on the accelerated phasing-in of double-hull or equivalent design requirements for single-hull oil tankers.

³⁴ Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community.

supporting the draft Convention in principle, is of the opinion that the legal instrument will not cover the whole problem, as for instance warships and other government vessels are excluded from the scope of the draft Convention, and might come too late to provide binding rules for the recycling of many of the phased-out single-hull oil tankers. So, additional measures will be necessary, particularly for the interim period. Aiming at an EU-wide strategy for the dismantling of ships, the Commission will open a dialogue with Member States and stakeholders. A study on the state of play and future options for ship dismantling and pre-cleaning is to be launched in the summer of 2006 and expected to deliver results in early 2007. For a market to take off in this area, it is likely such facilities will need forerunner clients, including public authorities disposing of vessels.

Steps to address the issue of ship dismantling need also to be taken at EU level. In the framework of the development of the future IMO Convention in order to achieve binding minimum standards on ship recycling at international level, the future EU Maritime Policy should promote and support concrete actions at EU level such as the establishment of a network of pre-cleaning (decontamination) facilities for EU ships. Of course, these actions have to be based on a comprehensive impact assessment with regard to economic, legal and environmental consequences and their compliance with EC law.

3.1.5.6. Air-Pollution from seagoing ships – Engine Emissions

Air pollution from shipping in EU waters during the year 2000 contributed to 2.6 million tonnes of SO₂, 3.6 million tonnes of NO_x, 134 thousand tonnes of hydrocarbons and 21 thousand tonnes of particulates. The above figures equate to 39% and 36% of total SO₂ and NO_x EU-15 emissions. It is the sulphur dioxide and nitrogen oxides that contribute substantially to acidification, formation of very small particles which damages vegetation, the human health and contributes to global warming and this is mainly the reason why SO₂ and NO_x emissions will continue to be the dominant policy driver for the year to come.

The European Commission, after consulting two technical independent studies on air pollution from seagoing ships, published on January 2001 a discussion paper entitled: “A community strategy on air pollution from seagoing ships” requesting written comments until February 2002. On 28th June 2004 the European Council reached agreement on proposed amendments to Directive 1999/32/EEC, dealing with the sulphur content of fuels for shipping. The agreed common position is in the hands of the European Parliament for a second reading.

At international level, the issue of controlling air pollution from ships, in particular noxious gases from ships' exhausts, was discussed at the IMO in the lead up to the adoption of the 1973 MARPOL Convention. However, it was decided not to include regulations concerning air pollution at the time.

In May 2004, the 1997 Protocol to the MARPOL Convention, which sets regulations for the prevention of air pollution from ships, was ratified with more than 50% of the world merchant tonnage and entered into force twelve months later in May 2005. In addition, in November 2003 IMO adopted the resolution A.963(23) on IMO Policies and practices related to the reduction of greenhouse gas emissions from ships, as Annex VI to the MARPOL Convention does not cover the emission of greenhouse gases from ships. The

European Council agreed common position is almost identical to the IMO measures in MARPOL Annex VI³⁵..

The European Commission has funded numerous studies towards assessing the levels of air pollution in the EU as well as performed a recent feasibility analysis on alternative market-based mechanisms to promote low-emission shipping in European Union sea areas (NERA report)³⁶. In addition wealth of information and statistics can be found in the reports available online from the European Environment Agency web-site³⁷.

The FP6 Integrated Project HERCULES aims to develop new technologies to drastically reduce gaseous and particulate emissions from marine engines and concurrently increase engine efficiency and reliability, hence reduce specific fuel consumption, CO₂ emissions and engine lifecycle costs. The FP6 Integrated Projects FELICITAS and MC-WAP aim to accelerate the development and deployment of cost-competitive, European fuel cell based energy systems and component technologies for maritime transport, therefore contribute to reducing air-pollution especially close to densely populated sea corridors.

Based upon these initiatives the Commission, together with the Member States initiated within the IMO MEPC the revision of Annex VI to the MARPOL Convention.

3.1.5.7. Reliable Inspection and Repair, safety of life on board

Inspection and repair are fundamental stages during the lifetime of a ship. However their proliferation has led the involved stakeholders to complain about the multiplicity and the involved cost. A harmonized system of survey and certification covering international shipping regulations was adopted by the International Maritime Organization and entered into force on February 2000. IMO resolution A.883(21) on global and uniform implementation of the harmonized system of survey and certification (HSSC), aims at encouraging all States to implement the harmonized system of survey and certification (HSSC), even if they are not parties to the relevant Protocols.

Under the 3rd Maritime Safety Package³⁸ the Commission proposed a mandatory use of the relevant IMO guidelines of the HSSC for all ships flying a flag of an EU Member State. These guidelines are already mandatory for any ro-ro vessel sailing on a regular service to and from an EU port.

Today Member States are already bound to respect the mandatory rules imposed under Directive 94/57/EC when relying upon a recognized organisation and to inspect foreign ships entering their ports in accordance with the Directive on Port State Control. Commercial (vetting) inspections as well as other smaller inspections related to immigration, port health and customs issues also exist.

³⁵ It mainly differs in the 0.2% sulphur limit on fuel used by inland vessels and by seagoing ships at berth in EU ports.

³⁶ More on these can be found in the DG Environment web site at <http://europa.eu.int/comm/environment/air/transport.htm#3>

³⁷ See: <http://www.eea.eu.int/>

³⁸ Proposal for a Directive of the European Parliament and of the Council on compliance with flag State requirements - COM(2005) 586 final.

Although inspection and repair is compulsory for all vessels, particular attention has been traditionally paid to tankers. Recently, EMSA published the findings and recommendations of the High Level Panel of Experts on Double Hull Tankers³⁹. Six of the eight recommendations of the panel involve inspection issues and coating systems.

DG Research has regularly funded inspection related research programmes but the efforts have intensified after the Prestige accident. The FP6 research project CAS – Condition Assessment of aging ships for real-time Structural maintenance decision – started in February 2005 and aims to integrate all phases of the ship condition assessment process achieving seamless communication between the measurements on board the ship and the use of the most sophisticated structural assessment tools. A gain in overall efficiency of ships repairs and consequently in ships safety is expected from the integration of the process. A simplified ship electronic model of the ships to be inspected will be built. This is a new idea, as in previous studies the complete model made by the yard to build the ship, was supposed to be retrieved and used while the ship was sailing. The fact is that the complete ship model is very seldom available, so that drafting a simplified model from scratch is currently the only workable alternative.

Moreover and within the increased attention that is currently being paid to new concepts for the safe evacuation of passengers from cruise liners and ferries, the FP6 research project SAFECRAFTS sets out to improve existing life-saving equipment as well as develop new solutions by examining not only the technical aspects but also the human factor. This project has a clear emphasis on the rescue process by both quantifying the performance of the life saving appliances and improving the concept of reaching the rescue vessel in a safe and reliable manner. The challenge is to exploit a first principles approach in the design of rescue systems for passengers and crew, addressing both hardware and procedures/management.

3.1.6. *Use of risk assessment for developing and implementing safety policies*

3.1.6.1. Better reporting and analysis will yield substantial benefits

It is relatively straightforward to calculate the cost of new safety or security regulations but much harder to measure the cost of doing nothing or the benefit of introducing the new measures. Are shipping accidents a function of traffic density or are there more important factors at play (see illustration)? Where are the risks from freak waves greatest? Are vessels flying flags of convenience more accident prone? What is the environmental damage caused by oil spillage or introduction of alien species? Solving these problems without imposing unnecessary, expensive and time-consuming bureaucracy is essential. The cost to businesses and individuals of complying with reporting regulations is not negligible. Stakeholders need to be reassured that the information they provide is really being used. The transformation of data to knowledge can be facilitated through the deployment of technology that can analyze samples quickly, process distributed heterogeneous data, translate languages from all corners of the earth, communicate from the furthest oceans and track movements accurately.

³⁹ <http://www.emsa.eu.int/Docs/workshops/dh%20tanker%20panel%20final%20report%20complete%203.6.05.pdf>

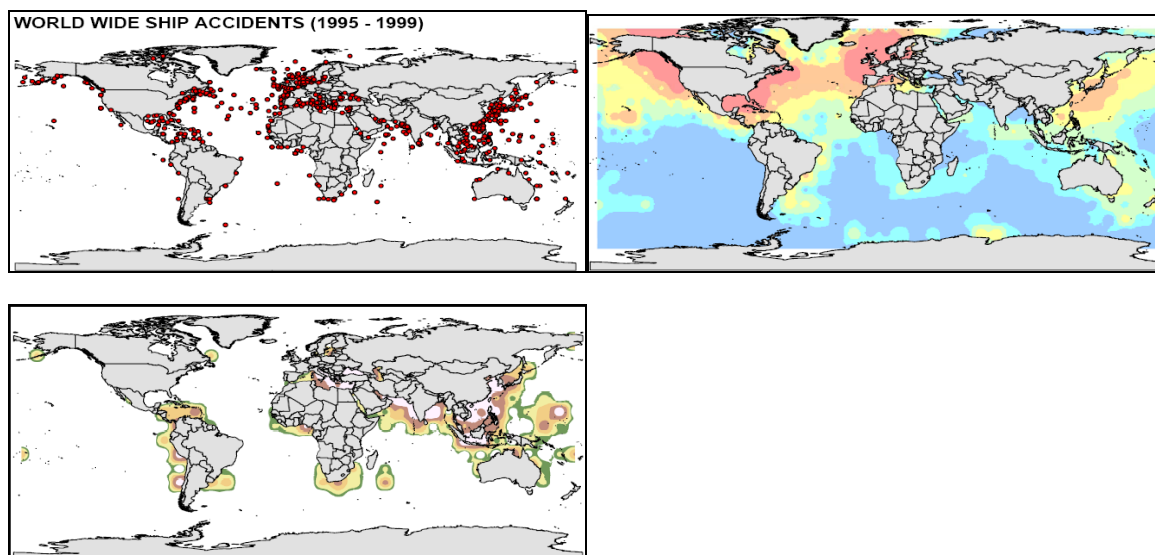


Figure 1 Accident maps from the FP5 Maxwave project

top left	ship accidents from the Lloyd's Marine Information Service and Lloyd's casualty reports
top right	shipping density from JCOMMOPS
bottom left	shipping accident density normalised by shipping density to indicate risk areas from FP5 MAXWAVE project

Risk assessment of accidents rests on the painstaking analysis of past events including near-miss incidents as well as real accidents.

Discrepancies in accident-rates in different waters, amongst different flag-states or for different vessel constructions are essential pieces of background information for negotiation on safety standards. Significant challenges in building the information systems required to support this analysis include the agreement as to what needs to be reported, how the data should be described, who they should be reported to and what should be kept confidential. Presently vessels are obliged to report to the International Maritime Organization. Lloyd's Marine Information Service also makes its accident data available to researchers.

The European Maritime Safety Agency, EMSA is presently studying how to improve the taxonomy of its reporting system and it may follow precedents set in the aviation industry and monitor "near-miss" incidents that do not result in an accident.

The Commission's Joint Research Centre already maintains the analogous European Co-ordination Centre for Aviation Incident Reporting Systems (ECCAIRS) system on the principle of collection at a national level, integration on a European level and analysis by the widest possible community. It has become apparent in this domain that agreement of sound reporting standards amongst European nations provides an impetus for adoption at a

global level. In the coming months JRC will determine whether any lessons learned from the aviation sector can be applied also to the maritime sector.

Of course some incidents might not be reported, or might be misreported, and an effective quality check requires corroboration with other sources. EMSA's early warning system routinely collects information from the world's press and Member State Maritime Rescue Coordination Centers.

This includes the European Media Monitor, built and operated by the JRC, which already continually scans 800 media sources in 25 languages for keywords selected by EMSA. Further developments could automatically sift the reports, discard irrelevant information, cluster those relating to the same event, extract relevant features and classify them according to the taxonomy developed for the reporting system. Information from other systems, such as the Global Marine Distress and Safety System (GMDSS) can provide additional information.

3.1.6.2. Analysis of oil spills

Regional conventions such as HELCOM and BONN maintain databases on oil spill sightings and the GMES project OCEANIDES gathered these and other information from aircraft and satellite observations into a prototype EU-wide database which is now maintained by JRC. Some work has been done to convert these raw measurements of spill size and position into useful information. For instance JRC has developed spill-density maps of the Mediterranean and Black Sea and the OCEANIDES project partners made some simulations to determine how much oil might reach the Baltic coast. But more measurements of the type and quantity of oil spilled as well as research into how it disperses under different sea conditions are needed before reliable quantitative information on the volume of oil spilled annually in European seas and its environmental impact can be provided

Finally, the enforcement of European legislation in waters under the jurisdiction of EU Member States could provoke an increasing of oil pollution in the areas of the Baltic, the Mediterranean and the Black seas not covered by the EU regime. The oil pollution however does not recognize boundaries and can affect wider areas. For this reason the monitoring activities have to be considered for the European seas as a whole and not focusing only on EU waters.

The FP6 research project POP&C (Pollution Prevention and Control - Safe Transportation of Hazardous Goods by Tankers) is focused on prevention and mitigation in ship design and operation for existing and new vessels. Specific objectives include:

- to develop a risk-based methodology to measure the oil spill potential of tankers;
- to develop a risk-based passive pollution prevention methodology (design and operational lines of defence);
- to develop a risk-based active post-accident pollution mitigation and control framework.

Within the first year activities, a rational database of AFRAMAX tankers was set up in to enable the full exploitation of the raw incidental data compiled and which was

commercially available by Lloyd's Marine Information Service (LMIS). The textual information presented in the incidental data were re-analysed by a team of the POP&C⁴⁰ project partners and were introduced in the newly developed database to produce appropriate incidental statistics. The analysis was mainly focused on six major incident/accident categories, namely non-accidental structural failure, collision, contact, grounding, fire, and explosion. Whilst, on one hand, the analysis made an attempt to identify basic events leading to these major casualty categories, on the other hand, factors related to consequences such as the degree of incidents' severity, event location and ship operating condition at the time of incident, loss of watertight integrity, weather impact, loss of life/injury, oil spill occurrence and the final outcome of incidents were also investigated.

3.1.6.3. Analysis of future trends

Based on the risk indicators developed for maritime safety and security, the EU will be in a position to answer questions such as "what will be the expected impacts in terms of safety of an opening up of a warmer Northeast passage to ships without strengthened hulls"⁴¹. It should be stressed that as the ice cover in the Arctic diminishes, the sea routes East of the Russian port of Murmansk on the Barents Sea are gradually opening up and the first container vessel with ice-breaking technology will enter service this year running east to the Yenisei river.

3.1.7. Contributions from research

The results obtained from the research effort within the Framework Programmes have already contributed towards the competitiveness of the European industry and provided better knowledge of how different technical solutions impinge on safety. The development of advanced marine diesel engines to drastically reduce gaseous and particulate emissions and concurrently increase engine efficiency and reliability, research to improve the stability of ro-ro vessels, the development and demonstration of decision support systems for navigation under normal and emergency operation conditions, and the establishment of guidelines and procedures for oil pollution prevention and control are only a few examples of contributions that European research has made towards improved maritime and environmental safety. However new research is still needed.

The vulnerability of the growing number of cruise ships and ferries to accidental or malicious damage is a matter for concern. Cruise ships now carry several thousand often elderly passengers. These ships have relatively shallow draughts and a high top weight which renders them potentially unstable in the event of a collision or fire: particularly in poor weather conditions. The difficulty of evacuating lower decks and the inadequacy of lifeboats and lifebelts in poor sea conditions was highlighted by the dreadful loss of life in the Estonia disaster. Research is still needed to address these issues.

3.1.8. Enforcement issues

Once new regulations applicable to all flags are introduced, the challenge is to enforce them in the ports of the EU, in the EU's territorial and jurisdictional waters and on the high

⁴⁰ See: <http://www.pop-c.org/>

⁴¹ Arctic Climate Impact Assessment - Scientific Report ACIA - Arctic Climate Impact Assessment, Cambridge University Press November 2005

seas. In this context, the legal system relating to oceans and seas based on UNCLOS needs further development in order to face new challenges. The existing regime applying to ships transiting international straits or EEZ provides limited jurisdictional rights to littoral States so as to protect effectively their marine environment. Without proper monitoring of compliance, shipowners or port authorities might be tempted to delay or avoid the implementation of new safety or security regulations in order to obtain a competitive advantage.

Port State Control (PSC) is the main mechanism for checking compliance with safety rules. PSC is the second line of defence against flag States which do not perform (inspect) their ships in accordance with the international (IMO) rules, which has to be implemented at regional level, since the flag States have, still today, not been able to combat substandard shipping adequately through the safety rules adopted at worldwide level. Practices and procedures related to inspections in Europe are applied through the Paris Memorandum of Understanding (Paris MOU)⁴². This MOU has been brought in line with the rules laid down in EU Directive 95/21/EC which obliges Member States to control at least one quarter of foreign vessels visiting their ports and to prioritize inspections according to a risk assessment. Under the 3rd Maritime Safety Package⁴³ a far-reaching reform aimed at replacing the current system (based on each Member State inspecting 25% of ships entering its ports) with a Community target of inspecting 100% of ships, bearing in mind the need to reduce the burden of carrying out inspections on high-quality ships. The aim is to give an advantage – thus less controls – to the good ships, to achieve a fair sharing of the burden between the Administration of all the EU port States and to maintain basic principle that any ship unseaworthy ship is detained. The Commission also proposed to toughen the current system with regard to substandard ships, in particular by strengthening the arrangements for banning those ships and for a more far-reaching use of the black list for identifying substandard operators.

The Directive on port-state-controls (95/21/EC) introduced the concept of "Mandatory Expanded Inspection" (MEI) on "high risk ships", requiring vessels of this particular class to be "expanded inspected" once every 12 months. Furthermore, Member States are obliged to notify the Commission, at intervals of six months, every case of non-inspection together with the reasons for not having inspected the ship in question. JRC has developed a pilot-system (called ViTeSSe) which is able, inter alia, to identify "high risk ships" calling at European ports without having made the mandatory extended inspection. Preliminary results of the system seem to indicate that in some cases the number of high-risk vessels⁴⁴ inspected is below the minimum mandated by Article 7a of the Directive. A tool such as ViTeSSe can thus be instrumental in monitoring compliance of Member States vis-à-vis maritime-safety regulation without imposing undue reporting burdens.

A proper reporting system on maritime safety issues is a long-term objective but might take years of delicate negotiations with international partners. Much can be done in the meantime. A good deal of the data is already available, for instance on web-sites of

⁴² <http://www.parismou.org/>

⁴³ Proposal for a Directive .../.../EC of the European Parliament and of the Council of [...] on port State control (Recast) - COM(2005) 588 final.

⁴⁴ The following vessels are identified by the directive as being high risk: Oil tankers above 3000 GRT and more than 15 years old, Gas and chemical tankers more than 10 years old, Bulk-carriers more than 12 years old, Passenger ships more than 15 years old (excluding those covered by the EU Ferry Directive 1999/35/EC)

regional authorities and on databases of commercial providers - MaritimeData, MarBase, Lloyd's Maritime Intelligence Unit, Lloyd's Fairplay – a proper analysis requires integration of information from these heterogeneous dynamic sources, sensitivity analysis and construction of indicators.

The fight against intentional or negligent ship-source pollution is among the European Union's priorities. The conclusions of the Copenhagen European Council of 12 and 13 December 2002 and the statement of the JHA Council of 19 December 2002 following the shipwreck of the tanker *Prestige*, in particular, express the Union's determination to adopt all the measures needed to avoid recurrences of such damage. The Directive and the Framework Decision on ship-source pollution and on the introduction of sanctions, including criminal sanctions, for pollution offences⁴⁵, constitute a first fundamental stage in this respect. In view of the Court of Justice decision of 13 September 2005 in the case C-176/03, it is possible that these texts will have to be adjusted in the coming months.

Enforcement and assessment of the effectiveness of the EU marine safety legislative is a responsibility given to the Commission. For the fulfillment of this responsibility the Commission can rely upon the assistance of EMSA.

In particular, the Green Paper should reflect on the appropriateness of imposing prison penalties in cases of maritime pollution by ships flying a flag other than the coastal State's, by amending the Framework Decision and Directive on maritime pollution, and of initiating simultaneously corresponding reflections at IMO level.

3.2. Maritime Security

3.2.1. Policy

Taking into account the global dimension of shipping, the Community policy on maritime security is primarily aimed at, being based on internationally agreed standards, protecting as well as facilitating legitimate sea-going trade. This is why the same general principles laid above in paragraph 1.1 (Background) for maritime safety also apply for maritime security.

The general strategy for maritime security is contained in the Communication of the Commission to the Council, the European Parliament, the European Social and Economical Committee and the Committee of the Regions on enhancing maritime security (COM (2003) 229 final of 2/05/2003). The list of relevant international standards and of Community legislation on maritime security is reproduced in Annex 3.

The first Community legislative act on maritime security⁴⁶ was based on the 2002 amendments to the IMO SOLAS Convention, creating a new Chapter XI/2 "special

⁴⁵ Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements.

⁴⁶ Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on enhancing ship and port facility security.

measures to enhance maritime security" and the International Ship and Port facility Security Code (ISPS Code)⁴⁷.

Policy with regard to this issue falls under articles 70 (1) (d) and 80 (2) of the EC Treaty.

Although the first level of responsibility for enforcing this legislation lies with the Member States, the legislator gave the Commission the right and the duty to inspect within the Member States to assess the proper implementation of the Regulation. It has also to be noted that, unlike the IMO rules, the Regulation applies also to domestic shipping in the Member States.

This initial legislation has been complemented by a Directive on enhancing port security⁴⁸ which goes beyond the port facility boundaries as defined by the IMO, and which takes notably stock on the IMO/ILO 2004 Code of Conduct for Port Security.

3.2.2. *Risks associated with traded goods*

International container traffic has grown at an average of 8% p.a. in the last 25 years, a rate that is considerably higher than the 5% growth in world trade in the same period

The consequences of illegally traded goods can extend beyond the evasion of customs duties or anti-dumping regulations. They can also include the spread of disease through the import of infected material or the transport of material that might be used by terrorists.

The European legislator has recently taken a first step to set up an equivalent level of protection of the customs territory of the Community and to provide the European Union with a common risk management system, by the adoption of the "security amendments" to the Community Customs Code⁴⁹. This system will ensure a harmonized application of customs controls by the Member States upon commonly agreed standards and risk criteria for the selection of goods and economic operators.

It will set out the Community-wide profiles for priority areas which will allow an efficient allocation of resources and proper balance between customs controls and facilitation of legitimate trade. In the process of establishing the controls criteria all public bodies responsible for the various aspects of the safety of traded goods (customs, veterinary-health services, environmental bodies and the police) will be called on to help to answer the growing security and safety concerns from trade in goods which pose a risk to public health, the environment and consumers.

In order to allow for the appropriate risk-based controls, security amendments to the Community Customs Code stipulate that certain pre-arrival or pre-departure data will be mandatory to provide by the holder of the goods to the customs authorities to perform an

⁴⁷ The term "maritime security" has the following legal definition in Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on enhancing ship and port facility security: "*'maritime security' means the combination of preventive measures intended to protect shipping and port facilities against threats of intentional unlawful acts*".

⁴⁸ Directive 2005/65/EC of the European Parliament and of the Council of 26 October 2005 on enhancing port security

⁴⁹ Regulation (EC) 648/2005 of 13 April 2005 amending Council Regulation (EEC) No 2913/92 establishing the Community Customs Code.

appropriate risk assessment. The exchange of data between traders and customs authorities will be done electronically. The amended legal framework takes into account also the need to facilitate trade between the EU and third countries. In this context, it should be pointed out that the EU co-operates with the United States of America in the framework of the Container Security Initiative (CSI)⁵⁰, which was launched after the 11 September 2001 terrorist attacks.

Economic operators who will fulfill certain common criteria relating to the control systems, financial solvency and compliance record will receive the maximum degree of facilitation possible. Their status as Authorized Economic Operators (AEO) will be recognised by the competent customs authorities during risk analysis, although the right to control will remain. The legislative discussion on implementing provisions relating to establishment of the EU-wide risk management system, in particular agreed data list for risk analysis, simplifications for the AEO and procedural questions has already begun.

Tracking of anomalous cargoes, especially those that can be routed through intermediate ports to disguise their origins and destination, is equally important. JRC has developed data-mining techniques to process routing information and identify the misreporting of origins by those wishing to avoid restrictions or taxes. It has also developed tamper-proof seals for checking the integrity of containers of nuclear material. A combination of these technologies could be further developed to identify cargoes that might threaten the security of Europe.

3.2.3. *Risk assessment: International Ship and Port Facility Security Code and information on traffic patterns*

Techniques for assessing the risk of an event that is rare or has never happened – a terrorist attack on an offshore oil production facility, the smuggling of components for weapons of mass destruction across borders – present different challenges than assessing the risks from more frequent events such as vessels foundering in a storm or discharging oil into a protected area. Under the International Ship and Port Facility Security Code (ISPS Code) and Regulation (EC) 725/2004 shipping companies, ship masters and port facilities operators are obliged to conduct security assessments and to establish security plans on their ships and port facilities.

A better understanding of normal traffic patterns will help those involved in making these security assessments. There is already much information available - from transponders, coastal radar, satellite sensors, sonar, cargo data bases and port state control data. And a number of initiatives are already underway to integrate information from one particular source (e.g. Automatic Identification System (AIS) transmissions along the Baltic coast) or for one particular sector (e.g. SafeSeaNet for maritime safety), but further integration between technologies and between sectors is necessary to build up a background against which abnormal behaviour could be detected.

The JRC has already developed systems to identify patterns in fishing traffic by combining technologies depending on cooperation with vessel skippers and space-based systems that

⁵⁰

Agreement of 28.04.2004 between the European Community and the United States of America on intensifying and broadening the Agreement on customs cooperation and mutual assistance in customs matters to include cooperation on container security and related matters (L 304/30/09/2004)

detect all vessels in a given area. It intends to build on this and ongoing research projects in maritime surveillance and data interoperability to measure and characterize maritime traffic for a wider user community.

3.2.4. *Compliance monitoring*

Efforts are needed for assessing how ship owners and port authorities are complying with rules on vessel security although, obviously, the results of such an exercise would need to be handled with discretion. The Community inspection regime created under article 9 of Regulation (EC) 725/2004 will certainly take a major role in this process, and research activities could certainly provide a support both in the inspection process and in the processing of the resulting data.

3.3. **Actions that could be considered under the Green Paper**

- Provision of relevant background information
- Strongly invite to the EU Member States to **ratify** as soon as possible the international **maritime Conventions**,
- Underline the need to regularly and in a proactive way improve the effectiveness and the implementation of the existing international regulatory framework (IMO and ILO),
- Request non-EU countries and the IMO and ILO for **accepting the European Community as a contracting party** under the relevant international conventions and under any new maritime safety and security related Convention or Protocol.

The introduction in the maritime safety and security related Conventions and Protocols of a “REIO” clause, as laid down in several existing international instruments (see Annex 3), to which the Community is already a Contracting Party should be requested.

In this process of improving the role within IMO of the European Community in management of shipping, it would be appropriate to invite all members of the IMO and the IMO Secretary-General to agree upon a pragmatic solution allowing the European Community to exercise its duties and obligations under the EC Treaty within the IMO. Furthermore, the European maritime forces should be joined better on the world stage (IMO) in order for Europe to defend its maritime interest better

- Invite all parties to the maritime safety and security conventions to solely use the tacit amendment procedure for amending existing requirements or introducing new provisions in the existing maritime safety (and security) Conventions and Protocols.
- Invite all potential parties to maritime safety and security conventions:
 - To **revise the entry into force mechanisms** laid down in the Conventions/Protocols which have not entered into force 5 years after their adoption,
 - To introduce in any new maritime safety and security related Convention/Protocol a **realistic ceiling for their entry into force** and a second, less restrictive entry into force ceiling, if the instrument has not entered into force 3 years after its adoption.

- Use untapped **potential of risk assessment** as a tool for supporting policy development. It will require a concerted effort from EU institutions to deliver operational feedback from ports and ships, to develop processes and methods for the routine provision of better information on maritime incidents and maritime traffic and to reduce uncertainties in the impact and scale of environmentally unfriendly practices through risk assessment. This will establish a more solid foundation for new legislation and enable the EU's interests to be defended better in international forums.
- Further legislative initiatives are needed to **strengthen the Community Civil Protection Mechanism**, to allow the Mechanism to conclude agreements with third countries that are not candidates or EEA countries, to continue the existing preparedness and response activities in the field of marine pollution accidents, and to strengthen certain activities in the field of marine pollution. Such initiatives will have to take into account the new tasks devoted to EMSA in the field of oil pollution response.
- To **improve the preparedness and the response capabilities** for dealing with situation in which pollution has occurred, some existing actions in the field of marine pollution could be strengthened. These include in particular:
 - Further work is needed on establishing scenarios and strengthening regional and international exercises. For instance, cross participation in regional exercises shall be encouraged. Moreover, the cooperation between EU Member States and neighbouring countries should be enhanced through common training.
 - Further work is need on the training, safety, and status of volunteers during oil spill response operations. Common European guidelines in this field could be encouraged.
 - More generally, there may be a need to consider the development of a common approach in contingency plans through the use of common guidelines.
 - Improving evaluation techniques: further work can be undertaken in improving techniques for the evaluation of damage caused to the environment, including the marine and coastal environment.
 - Environmental impact surveys: Within the Community framework for cooperation in the field of accidental or deliberate marine pollution, environmental impact surveys have been carried out in case of disasters with major environmental consequences. The Commission considers that a more systematic approach could be followed in this field.
- Take initiatives to **improve the overall governance framework**⁵¹.
 - In addition to the framework for effective protection and conservation of the marine environment which the Marine Strategy will provide, the more comprehensive approach of the Maritime Policy would need to devise strategic objectives and principles for the overall management and use of the seas to integrate the demands of different sectors and to address the issue of competing uses and their interactions -- through improved marine spatial planning?

⁵¹

See also the background paper No. 3 on Exclusive Economic Zones, underwater resources (including fisheries resources, continental shelves, law of the sea).

- International dimension – the High Seas represent about 80% of the biosphere. Yet there is a management gap – e.g. there are no marine protected areas in the High Seas and environmental protection is lagging. Achieving a high degree of protection of the marine environment in the High Seas is a key challenge for the Maritime Policy.
- Also essential is **research** in order to make informed policy choices and prevent degradation of the marine environment. The current gap in knowledge of marine ecosystems needs to be addressed (see the work of Interservice Working Group 4 on this issue). Marine research efforts need to be increased to underpin and support the sustainable use of marine resources, the sustainable management of the marine environment, and better understanding of ocean dynamics. This requires that novel science, integrated over different research disciplines – including socio-economic research – be developed to complement the traditional marine research agenda. Research will have to combine present knowledge about interactions and ecosystem structure and functions with scenario modelling based upon different types of risk assessments. While supporting implementation at the regional level, research will also have to address global pressures such as climate change and the effects of growth trends in other parts of world on the marine environment. Forecasting the future state of the marine environment under different assumptions of human impacts including a possible climate changes should be given high priority – 7th FP.
- Promote use of existing funding mechanisms, such as **Regional Policy funding**, to contribute to the development of maritime regions. This is possible in the area of prevention of pollution and accidents from the point of view of risk prevention, linked to Lisbon and Gothenburg priorities⁵², e.g:
 - establishment of port inspections to detect the risk of accidents; the treatment of run-off from the cleaning of ships (RTD and innovation to develop less costly ecotechnologies, infrastructure and training for ships' crews);
 - creation of safe harbours for ships in difficulty (towing facilities and quays adapted for this purpose).
- Possible regional funding following an accident to limit the consequences on the regional economy:
 - RTD, innovation and ICT to monitor the movement of the oil slick;
 - rapid reaction ships and equipment (pumping tools, floating barrages);
 - equipment for dealing with the aftermath of an oil slick and clean-up of the coastline.

However, the polluter pays principle should always apply and regional policy must not be considered as a substitute to the International Oil Pollution Compensation Fund (IOPC Fund).

- In the context of **maritime security**, the time is now to:

⁵²

Funding rules are laid down in the current regulations for the period 2000-2006. The proposals for the period 2007-2013 are focussed on three priorities ('Convergence', 'competitiveness and employment' and 'territorial co-operation') and make a specific reference to the diversification of areas dependent on fisheries.

- **Assess and monitor the proper implementation of the existing rules** at European level, and to consolidate this framework when necessary by interpretation provisions under Comitology proceedings;
- **Improve and complement** when necessary the existing international regulatory framework (mainly in the IMO);
- **Build reciprocal confidence** based on a proper implementation of the international maritime security regime with our trading partners;
- Provide relevant **assistance** to **neighbouring third countries**, notably in the EUROMED context;

4. ISSUES AFFECTING SECURITY IN THE MARITIME AREA

4.1. The challenges

The European Union and its Member States are currently confronted to a series of activities carried out by sea that are detrimental for their security and other essential interests. The following activities should in particular be taken into consideration.

4.1.1. *Illegal immigration by sea*

The sea, especially the Mediterranean and southern part of the Atlantic external sea border, is one important way of entrance of illegal immigrants inside the European Union. Illegal crossing of the sea external borders usually takes place by means of overcrowded and unseaworthy unregistered small boats or decrepit cargo-vessels flying convenience flags, by passengers arriving in ferries, or by other means (cargo-vessels, fishing boats, cruise ships, etc., carrying individuals or small groups with or without the knowledge of the persons responsible of the ship).

Although, according to the international Law of the Sea, coastal States may intervene in their territorial waters and contiguous zone in order to prevent and/or punish infringements of their immigration laws and regulations, cooperation with third countries of origin/embarkation is essential to counter this phenomena before the persons involved put their lives at risk in the sea.

In addition, newer challenges such as an integrated management of the EU's maritime borders will require further study. In December 2005, the European Council requested the exploration, by the end of this year, of the technical feasibility for the establishment of a surveillance system that will cover the southern maritime border of the EU and the Mediterranean Sea. This system could be part of a broader surveillance and vessel tracking system for security (and safety) in this sensitive sea area.

4.1.2. *Smuggling and drug trafficking*

The European Union is currently and seriously affected by the illicit traffic in drugs arriving by ship or other floating craft, as well as by the smuggling of cigarettes, alcohol, etc. by such means.

At present, there are three international conventions providing for various measures to be applied by the states parties in combating illicit drug trafficking on the high seas: the UN Convention on the law of the sea, the 1998 UN Convention against illicit traffic in narcotic drugs and psychotropic substances and the Council of Europe Agreement of 31 January 1995 on illicit traffic by sea, implementing Article 17 of the 1998 UN Convention.

At the EU level, Member States shall provide each other with mutual assistance and shall cooperate with one another, with a view to preventing and detecting infringements of national customs provisions, and prosecuting and punishing infringements of Community and national customs provisions, through the Convention on mutual assistance and

cooperation between customs administrations ("Naples II" Convention) of 18.12.1997. In addition, pursuant to EC Regulation 515/97⁵³, Member States are required to cooperate and provide each other with mutual assistance, with a view to preventing and detecting infringements of Community customs provisions, e.g. in the case of smuggling of cigarettes and alcohol.

4.1.3. Terrorism

A Diplomatic Conference was convened at the International Maritime Organization (IMO) in London between 10-14 October 2005, to approve amendments to the Convention for the Suppression of Unlawful Acts at Sea (SUA). The 2005 Protocol to the SUA Convention aims at strengthening the international response to the maritime proliferation of Weapons of Mass Destruction (WMD). The amended SUA will provide for additional terrorism and non-proliferation offences, which broaden the international legal authority to conduct maritime interdictions of proliferation-related shipments. These amendments will complement common obligations under UN Security Council Resolution 1540 (2004) and close loopholes in the transfer of WMD, their delivery systems and related materials.

As amended, the SUA Convention will criminalise the illicit shipment of WMD, the use of a ship as a weapon, and the transportation of terrorists. The amended ship boarding provisions will enhance the collective ability to take action against proliferation-related shipments and be a critical tool in overall efforts to suppress terrorism and the spread of WMD.

These new ship boarding provisions will provide a legal framework to the US led "Proliferation Security Initiative" (PSI) to which most of the EU Member States are parties. Nevertheless, some Member States have already concluded or still negotiating bilateral boarding agreements with USA. A coordinated action at EU level to such initiatives would be highly desirable.

4.1.4. Piracy and armed robbery at sea

Although piracy does not affect the waters surrounding the EU, it is a real problem on several shipping routes frequented by vessels under European flags, owned by European shipping companies or that carry European supplies, such as the Malacca strait⁵⁴ and certain African coasts, or other areas that could be possibly affected in the future.

When the attacks take place within the territorial waters, it corresponds to the coastal State to act and to ensure the safety of navigation in its waters. Regarding the areas outside the jurisdiction of the coastal State, Articles 100 and the following of UNCLOS allow any State to exercise jurisdiction over pirate ships. In practical terms it is necessary that warships or other State vessels are present in the areas at risk in order to enforce the prohibition of piracy.

⁵³ Council Regulation (EC) No 515/97 of 13 March 1997 on mutual assistance between the administrative authorities of the Member States and cooperation between the latter and the Commission to ensure the correct application of the law on customs and agricultural matters.

⁵⁴ This sea strait is approx. 900 km long. More than 50 000 commercial ships pass through it yearly. This represents approximately a third of commercial traffic and half of the oil shipped in the world.

Taking into account that in 2004 almost 20% of all vessels reportedly attacked by pirates and armed robbers were EU-flagged vessels and that Europe is entirely dependent on shipped oil and gas from areas with continuing tensions, the problem could become critical, either as a direct effect of piracy actions or by the fear and the consequent rise in the cost of insurance and in market prices.

Therefore, a more active involvement of European Navies in anti-terrorism operations in some vulnerable sea areas around the world should be a priority for EU. This need has recently recognized by the UN Security Council, which expressed its concern for the increasing incidents of piracy and armed robbery off the coast of Somalia and encouraged UN Member States whose military assets operate in the international waters adjacent to the coast of this country 'to be vigilant to any incident of piracy therein and to take appropriate action to protect merchant shipping'⁵⁵; In this context, positive side effects from the involvement of navies in such operations should also be mentioned. According to an article, military operations around the Horn of Africa resulted in the reduction of piracy and the consequent fall of the insurance premiums by 75%⁵⁶.

4.2. Military contribution to security-related government activities

Within the EU, the various government functions which are carried out on coastal waters usually involve several agencies. In this context, the efficiency and the coherence which can be achieved between the agencies is questioned. Common needs can be addressed jointly, and synergies should be identified.

This general thesis is also true for the narrower field of security. Here there is also the additional connection to the role of the European navies and their increasing involvement in civilian activities related to, among others, security. The availability of effective instruments including military assets may play a decisive role to this end.

The European Security Strategy of 2003 takes stock of five key threats, three of which (namely, terrorism, proliferation of weapons of mass destruction and organised crime) clearly have maritime implications. There, it is stated that "none of the new threats is purely military; nor can any be tackled by purely military means. Each requires a mixture of instruments".

Currently, a study is conducted by the EU Military Staff on the Maritime Dimension in the European Security and Defence Policy (ESDP). The purpose of the study is to provide a better understanding of the present and future EU maritime missions and the possible contribution of naval capabilities to non-military oriented missions/operations.

Furthermore, surveillance of the sea spaces (territorial waters, contiguous zone, but also EEZ and the high seas) is a substantial component in the effort of the EU to react in the most efficient way to the current and future threats of any kind. Again here, there is perhaps most potential in the development of maritime surveillance, an area in which the convergence of civil and military technologies is an absolute requirement.

⁵⁵ Statement by the President of the Security Council made at the 5387th meeting of the Security Council, held on 15 March 2006.

⁵⁶ Die Zeit, 20.10.2005, p.8

Given the capabilities of the different surveillance systems⁵⁷, interoperability between these systems is indispensable. The Commission pointed this out in its Communication to the Council and the Parliament in November 2005 on Global Monitoring for Environment and Security (GMES)⁵⁸, by stressing that this program will make an important contribution to serve the EU's civil security needs, while all possible civil and military synergies should be pursued to ensure a better use of resources.

In the longer perspective, an effective cooperation and interoperability between all authorities involved, whether civilian or military, might be achieved.

4.3. Actions that could be considered under the Green Paper

Surveillance of the sea spaces (territorial waters, contiguous zone, but also EEZ and the high seas) and repression of such criminal or illegal activities are subject to provisions of international sea and maritime law. The Green Paper gives an opportunity to examine in which way provisions of international law allow for an effective protection of the essential interests of the European Union and its Member States, while duly taking into account the sovereignty and essential interests of third countries. In particular, a reflection should be undertaken regarding the appropriateness and ways:

- To **allow for the exercise of jurisdiction by Member States** within its territorial sea and contiguous zone also with regard to foreign ships in transit attempting to infringe the legislation of another Member State, and to facilitate the possibility for Member States to carry out controls within the territorial waters of other Member States (such possibility is already provided for in cases of "hot pursuit" by the Convention on mutual assistance and cooperation between customs administrations, and it is also foreseen in the Commission proposal presented in July 2005 for a Council decision amending the Convention implementing the Schengen Agreement in order to remove the limitation of hot pursuit to land borders in article 41 of the Schengen Convention).
- To provide for **exceptions to the principle of the exclusive jurisdiction of the flag State**, or to alleviate or supplement such principle, e.g. by flexible and rapid authorisation mechanisms, in order to fight more effectively against offences such as drug trafficking and trafficking of human beings.
- To **assist neighbouring Mediterranean countries to improve their coastal surveillance** in order to combat illegal immigration and, especially, to prevent that any boat or ship that does not fulfil the minimum security and safety requirements for the transport of persons from leaving their ports or navigating their territorial waters, and to organise the necessary search and rescue services. Bilateral or regional multilateral agreements could lay down these obligations, a duty to accept the persons whose entrance in the Schengen area is refused as well as technical, operational and financial assistance from the European Union. Ratification and implementation of the UN Convention against Transnational Organized Crime and of its Protocol against the

⁵⁷ See for details the background paper No. 4b on improving European integration in maritime reporting, monitoring and surveillance.

⁵⁸ COM(2005) 565 final of 10.11.2005

Smuggling of Migrants by Land, Sea and Air by these third countries should be promoted.

- To **exploit interoperability and synergies** between different observation systems; to set up a European satellite monitoring system to provide an opportunity for monitoring beyond the range of coastal radar (see working group 4) and examine the possibility for a specific legal regime for unmanned surveillance vehicles. The European Council request of last December for the possible development of a common surveillance system to combat illegal immigration in the Mediterranean should be seen as a first step towards the establishment of a comprehensive network of interlocking data systems on vessel identification, tracking and surveillance, covering coastal waters around the whole of the European coastline, providing access to and allowing cooperation between multiple government activities.
- As regards the control and surveillance of the external sea borders, to build upon the Programme of measures to combat illegal immigration across the maritime borders of the Member States of the European Union, adopted by the Council on 27 November 2003. It should also build upon the role devoted to the Customs in terms of cargo security by Regulation (EC) 648/2005 amending the Community Customs Code, which aims to set out the means for an equivalent level of protection in customs controls for goods brought into or out of the Customs Territory of the Community.
- To identify possible gaps and inconsistencies in fields where cooperation between civil and military assets exists or could be developed in the future. Also to make different systems and capabilities more coherent, create communalities between them so as to ensure that they can function seamlessly to the benefit of European people and interests, both across geography and across sectors.

MARITIME SAFETY and ENVIRONMENTAL SAFETY

LIST OF TEXTS ADOPTED –

1. Council Directive 79/115/EEC, of 21 December 1978 concerning pilotage of vessels by deep-sea pilots in the North Sea and English Channel (*OJ L 33 of 8.2.1979, p.32*)

84/358/EEC: Council Decision of 28 June 1984 concerning the conclusion of the Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances, Official Journal L 188 , 16/07/1984 P. 0007 - 0016
2. Council Decision 92/143/EEC, of 25 February 1992, concerning radio navigation systems for Europe (*OJ L59 of 4.3.1992, p.17*)

94/157/EC: Council Decision of 21 February 1994 on the conclusion, on behalf of the Community, of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention as revised in 1992), Official Journal L 073, 16/03/1994 P. 0019 – 0019
3. Council Regulation (EC) N° 2978/94, of 21 November 1994 on the implementation of IMO Resolution A.747(18) on the application of tonnage measurement of ballast spaces in segregated ballast oil tankers (*OJ L 319 of 12.12.1994, p.1*)**
4. Council Directive 94/57/EC of 22 November 1994 on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations (*OJ L 319 of 12.12.1994, p. 20*), amended by:
 - Commission Directive 97/58 of 26 September 1997 (OJ L 274 of 7.10.1997, p.8)
 - Directive 2001/105/EC of the European Parliament and the Council of 19 December 2001 (OJ L 19 of 22.1.2002, p. 9)
 - Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)
- 4bis** Commission Decision 96/587/EC of 30 September 1996 on the publication of the list of recognised organisations which have been notified by Member States in accordance with Directive 94/57/EC (OJ N° L 257 of 10.10.1996, p.43), amended by:
 - Commission Decision 98/403/EC of 12 June 1998 (OJ L 178 of 23.6.1998, p. 39)
 - Commission Decision 2002/221/EC of 14 March 2002 (OJ L 73 of 15.3.2002, p.30)

**

 Repealed with effect from 31December 2007. (See under 18.)

4ter Commission Decision 2000/481/EC of 14 July 2000 on the recognition of 'RINAVE - Registro Internacional Naval, SA' in accordance with Council Directive 94/57/EC (OJ L 193 of 29.7.2000, p. 91)

4quater Commission Decision 2001/890/EC: of 13 December 2001 on the recognition of the "Hellenic Register of Shipping" in accordance with Article 4(3) of Council Directive 94/57/EC (OJ L 329 of 14.12.2001, p. 72)

5. Council Directive 95/21/EC, of 19 June 1995, concerning the enforcement, in respect of shipping using Community ports and sailing in the waters under the jurisdiction of the Member States, of international standards for ship safety, pollution prevention and shipboard living and working conditions (port State control) (*OJ L 157 of 7.7.1995, p.1*), amended by:

- *Council Directive 98/25/EC of 27 April 1998 (OJ L 133 of 7.5.1998, p. 19)*
- *Commission Directive 98/42/EC of 19 June 1998 (OJ L 184 of 27.6.1998, p. 40)*
- *Commission Directive 1999/97/EC of 13 December 1999 (OJ L 331 of 23.12.1999, p. 67)*
- *Directive 2001/106 of the European Parliament and the Council of 19 December 2001 (OJ L 19 of 22.1.2002, p. 17)*
- *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*

5bis Commission Directive 96/40/EC, of 25 June 1996, establishing a common model for an identity card for inspectors carrying out port State control (OJ L 196 of 7.8.1996, p.8).

6. Council Regulation (EC) N° 3051/95, of 8 December 1995 on the safety management of roll-on/roll-off passenger ferries (ro-ro ferries) (*OJ L 320 of 30.12.1995, p. 14*)⁵⁹, amended by:

- *Commission Regulation (EC) N° 179/98 of 23 January 1998 (OJ L 19 of 24.1.1998, p.35)*

7. Council Directive 96/98/EC, of 20 December 1996, on marine equipment (*OJ L 46 of 17.2.1997, p.25*), amended by:

- *Commission Directive 98/85/EC of 11 November 1998 (OJ L 315 of 25.11.1998, p.14)*
- *Commission Directive 2001/53/EC of 10 July 2001 (OJ L 204 of 28.7.2001, p. 1)*
- *Commission Directive 2002//75/EC (OJL 254 of 23.9.2002, p.1)*
- *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*

⁵⁹ Repealed with effect from 24 March 2006.

8. Council Directive 97/70/EC, of 11 December 1997 setting up a harmonised safety regime for fishing vessels of 24 metres in length and over (*OJ L 34 of 9.2.1998, p.1*), amended by:
- *Commission Directive 1999/19/EC of 18 March 1999 (OJ L 83 of 27.3.1999, p.48)*
 - *Commission Directive 2002/35/EC of 25 April 2002 (OJ L 112 of 27.4.2002, p. 21)*
 - *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*
9. Council Directive 98/18/EC, of 17 March 1998, on safety rules and standards for passenger ships (*OJ L 144 of 15.5.1998, p.1*), amended by:
- *Commission Directive 2002/25/EC of 5 March 2002 (OJ L 98 of 15.4.2002, p. 21)*
 - *Directive 2003/24/EC of the European Parliament and of the Council of 14 April 2003 (OJ L 123 of 17.5.2003, p. 18)*
 - *Directive 2003/75/EC of the European Parliament and the Council of 29 July 2003 (OJ L 190 of 30.07.2003, p.6)*
 - *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*
10. Council Directive 98/41/EC, of 18 June 1998 on the registration of persons on board passenger ships (*OJ L 188 of 2.7.1998, p. 35*), amended by:
- *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*
11. Council Directive 99/35/EC of 29 April 1999 on a system of mandatory surveys for the safe operation of regular ro-ro ferry and high speed passenger craft services (*OJ L 138 of 1.6.1999, p.1*), amended by:
- *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*
 - *Commission Decision 2003/587/EC of 5 August 2003 on compliance of the fire-extinguishing system used on the ro-ro ferry "Finnsailor" (IMO No. 8401444) with Council Directive 1999/35/EC of 29 April 1999 (notified under document number C(2003) 2819) (JO L 198 of 6.08.2003, p.17)*
12. Directive 99/95/EC of the European Parliament and of the Council of 13 December 1999 concerning the enforcement of provisions in respect of seafarers' hours of work on board ships calling at Community ports (*OJ L 14 of 20.1.2000, p. 29*)
13. Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues (*OJ L 332 of 28.12.2000, p 81*), amended by:
- *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*

14. Decision 2850/2000/EC of the European Parliament and of the Council setting up a Community framework for cooperation in the field of accidental or deliberate marine pollution) (OJ L 332 of 28.12.2000, p. 1)
15. Directive 2001/25/EC of the European Parliament and of the Council of 4 April 2001 on the minimum level of training of seafarers (*OJ L 136 of 18.5.2001, p. 17*)⁶⁰. Amended by:
- *Commission Directive 2003/103/EC of 17 November 2003 (OJ L 326 of 13.12.2003, p. 28)*
 - *Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)*
16. COUNCIL DECISION of 23 October 2001 establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions (2001/792/EC, Euratom) (OJ L297 of 15.11.01, p.7)
17. Directive 2001/96/EC of the European Parliament and the Council of 4 December 2001 establishing harmonised requirements and procedures for the safe loading and unloading of bulk carriers (*OJ L 13 of 16.1.2002, p. 9*) Amended by:
Commission Directive 2002/84/EC of 5 November 2001(OJ L 324 of 29.11.2002)
18. Regulation (EC) N° 417/2002 of the European Parliament and of the Council of 18 February 2002 on the accelerated phasing-in of double hull or equivalent design requirements for single hull oil tankers and repealing Council Regulation (EC) No. 2978/94 (*OJ L 64 of 7.3.2002, p. 1*). Amended by:
- *Commission Regulation (EC) N° 1726/2003 of 17 November 2003 (OJ L 249 of 1.10.2003, p.1)*
19. Directive 2002/59/EC of the European Parliament and the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC (*OJ L 208 of 5.8.2002, p. 10*)
20. Regulation (EC) N° 1406/2002 of the European Parliament and of the council of 27 June 2002 establishing a European Maritime Safety Agency (*OJL 208, 05.08.2002, p.1*). Amended by:
- *Regulation (EC) n° 1644/2003 of the European Parliament and of the Council of 22 July 2003 (OJ L 245 of 29.09.2003, p.10)*
 - *Regulation (EC) No. 724/2004 of the European Parliament and of the Council of 31 March 2004 amending Regulation (EC) No 1406/2002 (OJL 123, 29.04.2004, p.1)*
21. Council Decision (2002/762/EC) of 19 September 2002 authorising the Member States, in the interest of the Community, to sign, ratify or accede to the International

⁶⁰ This Directive repeals with effect from 7 June 2001 Council Directive 94/58/EC of 22 November 1994 on the minimum level of training of seafarers (*OJL 319,12/12/1994, p28*), as amended by the Directive 98/35/CE.

Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (the Bunkers Convention) (*OJ L 256 of 25.09.2002, p.7*)

22. Regulation (EC) N° 2099/2002 of the European Parliament and of the Council of 5 November 2002 establishing a Committee on Safe Seas and Prevention of Pollution from Ships (COSS) and amending the Regulations on maritime safety and prevention of pollution from ships (*OJ L 324 of 29.11.2002, p 1*)
 - *Commission Regulation (EC) N° 415/2004 of 5 March 2004 (OJ L 68 of 06.03.2004, p.10)*
23. Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002 amending the Directives on maritime safety and the prevention of pollution from ships (*OJ L 324 of 29.11.2002, p 53*)
24. Council Decision (2002/971/EC) of 18 November 2002 authorising the Member States, in the interest of the Community, to ratify or accede to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 (the HNS Convention) (*OJ L 337 of 13.12.2002, p. 55*)
25. Regulation (EC) N° 782/2003 of the European Parliament and of the Council of 14 April 2003 on the prohibition of organotin compounds on ships (*OJ L 115 of 9.5.2003, p 1*)
26. Directive 2003/25/EC of the European Parliament and of the Council of 14 April 2003 on specific stability requirements for ro-ro passenger ships (*OJ L 123 of 17.5.2003, p 22*)
27. Regulation (EC) No. 725/2004 of the European Parliament and the Council of 31 March 2004 on enhancing ship and port facility security (*OJ L 129 of 29.04.2004, p.6*)
28. Regulation (EC) No. 789/2004 of the European Parliament and of the Council of 21 April 2004 on the transfer of cargo and passenger ships between registers within the Community and repealing Council Regulation (EEC) No 613/91 (Text with EEA relevance) (*OJ L 138 of 30.04.2004, p.19*)
29. Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements (*OJ L255 of 30.09.2005, p.11*)
30. Regulation (EC) N° 326/2006 of the European Parliament and of the Council of 15 February 2006 on the implementation of the International Safety Management Code within the Community and repealing Council Regulation (EC) N° 3051/95 (*OJ L 64 of 4.03.2006, p.1*)

REIO Clause⁶¹**Regional Economic Integration Organizations**

- (1) A Regional Economic Integration Organization, which is constituted by sovereign States that have transferred competence over certain matters governed by this [Convention] [Protocol] to that Organization, may sign, ratify, accept, approve or accede to this [Convention] [Protocol]. A Regional Economic Integration Organization which is a Party to this [Convention] [Protocol] shall have the rights and obligations of a State Party, to the extent that the Regional Economic Integration Organization has competence over matters governed by this [Convention] [Protocol].
- (2) Where a Regional Economic Integration Organization exercises its right of vote in matters over which it has competence, it shall have a number of votes equal to the number of its Member States which are Parties to this [Convention] [Protocol] and which have transferred competence to it over the matter in question. A Regional Economic Integration Organization shall not exercise its right to vote if its Member States exercise theirs, and vice versa.
- (3) Where the number of States Parties is relevant in this [Convention] [Protocol], [including but not limited to Articles ...of this [Convention] [Protocol], the Regional Economic Integration Organization shall not count as a State Party in addition to its Member States which are States Parties.
- (4) At the time of signature, ratification, acceptance, approval or accession the Regional Economic Integration Organization shall make a declaration to the Secretary-General specifying the matters governed by this [Convention] [Protocol] in respect of which competence has been transferred to that Organization by its Member States which are signatories or Parties to this [Convention] [Protocol] and any other relevant restrictions as to the scope of that competence. The Regional Economic Integration Organization shall promptly notify the Secretary-General of any changes to the distribution of competence, including new transfers of competence, specified in the declaration under this paragraph. Any such declarations shall be made available by the Secretary-General pursuant to Article ...of this [Convention] [Protocol].

⁶¹ Based upon the wording introduced in Article 19 of the Protocol of 2002 to the Athens Convention relating to the carriage of passengers and their luggage by sea, 1974

MARITIME SECURITY

Relevant international instruments:

- December 2002 amendments to the IMO SOLAS Convention, in particular the new Chapter XI/2 "special measures to enhance maritime security" and the International Ship and Port facility Security Code (ISPS Code)
- The IMO/ILO 2004 Code of conduct for Port Security

List of Community texts adopted:

- Communication of the Commission to the Council, the European Parliament, the European Social and Economical Committee and the Committee of the Regions on enhancing maritime security (COM (2003) 229 final of 2/05/2003)
- Regulation (EC) No. 725/2004 of the European Parliament and the Council of 31 march 2004 on enhancing ship and port facility security (Text with EEA relevance) (*OJ L 129 of 29.04.2004, p.6*)
- Regulation (EC) No. 724/2004 of the European Parliament and of the Council of 31 March 2004 amending Regulation (EC) No. 1406/2002 (OJL 123, 29.04.2004, p.1)
- Commission Regulation (EC) No. 884/2005 of 10 June 2005 laying down procedures for conducting Commission inspections in the field of maritime security (Text with EEA relevance) (*OJ L 148 of 11.06.2005, p.25*)
- Directive 2005/XXX/EC of the European Parliament and of the Council of XXXX 2005 on enhancing port security (*formally adopted on October, 6th 2005, to be published shortly*)