



QUALITY SHIPPING, SAFER SEAS



CLEANER OCEANS

CONTENTS

1	FOREWORD	
2	INTRODUCTION	
4	ENVIRONMENT	Environmental protection Dealing effectively with ship waste Reducing air pollution Controlling scrapping Training and cooperation
6	SHIPS AND PORTS	Improved control of construction and maintenance Consistency of Port State Control
8	SEAFARERS	Getting seafarers properly trained
10	POLLUTION RESPONSE	Fighting oil pollution MAR-ICE, CleanSeaNet
14	TRAFFIC	Improved vessel tracking and maritime surveillance Vessel tracking beyond Europe's waters Integrating maritime surveillance systems
16	OUTLOOK FOR 2015	

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu>).
Cataloguing data can be found at the end of this publication.

Lisbon: European Maritime Safety Agency, 2009
ISBN 978-92-95032-25-5

© European Maritime Safety Agency, 2009.

For image credits, see inside back cover.

Reproduction is authorised provided the source is acknowledged.

Printed in Belgium

Printed on white chlorine-free paper

FOREWORD

Welcome to the European Maritime Safety Agency. This brochure will enable you to answer the following questions: 'What is the European Maritime Safety Agency (EMSA)?', 'Why has it been created?' and 'What does it do?'

To begin, it is worth placing the Agency's activities within the wider context of safety at sea. Even when using the latest technology, moving large amounts of cargo and passengers by sea is a dangerous activity. In the recent past, hundreds of EU citizens have died in ferry disasters (Estonia, Herald of Free Enterprise and Express Samina). Thousands more have been injured, or have lost family members or friends at sea. For those spending their working lives in shipping, the risks are greater still. Seafarers are often exposed to risks of death or injury.

Shipping incidents can affect people's lives in other ways too. For many decades, Europe's shores have suffered the devastating effects of pollution as a result of oil dumped accidentally, or deliberately, by ships. Hazardous cargos are ever more frequent, with the ships carrying them increasing in number and size. On top of this, EU waters see thousands of smaller ship accidents and incidents every year. Together, the actual and potential economic cost of these problems is huge, in waters where traffic density is increasing.

The dangers of the sea are nothing new, and many authorities - including the International Maritime Organization (IMO) and more recently the EU institutions - have been dealing with these issues for many years. However, maritime safety issues were brought sharply into focus with the sinking of the oil tanker Erika off the coast of France in 1999, followed by the sinking of the Prestige off Spain in 2002. These disasters led to the decision to set up a new EU body which could act as the technical and operational arm of EU decision makers. This organisation would need to tackle the many different maritime safety challenges identified both at the time, and in the future.

With this in mind, EMSA was established in 2003. The Agency has been required to provide technical support and advice to the European Commission and Member States in certain key safety areas, and to monitor the ways in which different Member States and organisations are implementing EU legislation.

In addition, EMSA has also been given operational tasks in the field of oil pollution response, satellite monitoring and in the long-range identification and tracking of vessels (LRIT). The overall goal is to make a significant contribution to progressively improved safety in EU waters. To achieve this, the Agency cooperates with many different interests and, in particular, with the European institutions, Member State authorities, international bodies and the maritime industry.

The Agency's task is a significant one, given the scale of EU involvement in maritime transport. The 27 EU Member States have 1200 commercial ports, and 100000 kilometres of coastline. These handle around 90% of EU external trade and around 40% of trade between EU countries. 400 million passengers pass each year through EU ports. In this context, there are an ever growing number of tankers carrying increasing volumes of oil, and other hazardous substances, through sensitive areas such as the Mediterranean, the Baltic Sea, the Black Sea, and the Arctic.

This brochure is a brief introduction to EMSA, providing an overview of our most significant tasks and activities. It is naturally not exhaustive, and many tasks are not mentioned. For further information about what we do, you are invited to visit the EMSA website (www.emsa.europa.eu).

INTRODUCTION

Over recent years, globalisation has led to an increase in world trade which in turn has meant that shipping has expanded considerably. As waterborne traffic increases, so does the need for increased oversight of maritime safety.

Despite the current economic downturn, more ships were carrying more goods than has been the case in the past 20 years. The need to deliver goods across global markets has led to greater use of existing ships, and has increased the demand for new vessels and qualified crew. In 2008, 22 752 merchant vessels visited European ports, an increase of (+ 3.9% compared to 2007). 694 500 movements in ports were recorded by ships sailing in European waters in 2008 (+5.8% compared to 2007).

With over 80% of world trade being carried by sea, maritime transport remains the backbone of international trade. For the EU, the world's most important exporter and the second biggest importer, shipping provides transport services between Europe and the rest of the world and between third countries in all regions of the globe. It is estimated that over three million people work directly in the European waterborne sector, generating a turnover of about EUR 200 billion, with an added value totalling about EUR 100 billion.

Although EU waters are now generally safer than in the past, hundreds of accidents and incidents still occur every year (Table 1). In order to further improve this safety record, it is fundamental to learn lessons from them when they occur, in order to continue to improve maritime safety. Reported accidents have been steadily growing in the last few years, reflecting the increase in numbers of ships sailing and vessel traffic density. Today, in addition to poor weather conditions, the majority of accidents are blamed on human factors such as insufficient training; lower manning levels and fatigue, which are being addressed by those responsible for maritime safety. Further factors, such as concerns about climate change, marine habitats and security threats are setting the political agenda for maritime legislators across the planet.

The International Maritime Organization (IMO, www.imo.org) is the global legislator. It is a United Nations agency that brings together 168 states of the world to determine the best type of approach to ensure safe, secure and clean shipping in the competitive environment of a global industry. The states represent their national interest, namely their fleets of merchant vessels, and are generally described as 'flag states'. All EU Member States are represented at the IMO, which has its seat in London. The IMO sets the rules determining how ships are built, maintained, operated, crewed and ultimately disposed of.

At the EU level, the European Commission is active in taking the international rules determined at the IMO, and translating them into laws that are binding and enforceable. This demonstrates the high level of commitment that the European Commission and the EU Member States have towards maritime safety issues. Along with ensuring that ships are built, maintained and operated in accordance with the international rules, environmental protection is also a pressing issue for the maritime sector. Trends in ship and cargo traffic, coupled with mounting evidence of the environmental hazards involved and changing industrial practices, have prompted much-needed initiatives to reduce various types of pollution and emissions from ships.

A number of maritime safety initiatives have led to a significant decrease in accidental oil pollution in and around EU waters in recent years. Nonetheless, it is estimated that some 80% of the total pollution from ships originates from operational discharges. These are discharges of waste oils, or from tanks resulting from cleaning operations. Many of these are deliberate and in violation of international rules. And it must also not be forgotten that the potential for another disaster is always with us.

Since it was set up in 2003, EMSA has been working on prevention, enforcement and response. To do this, EMSA assesses the practical implementation and impact of existing EU rules. It also provides the European Commission and EU Member States with the necessary assistance and expertise to properly apply Community legislation in all fields of maritime safety.

EMSA provides technical advice on a number of maritime safety-related issues to the Commission and the EU Member States when they are preparing new legislation. It also contributes to coordinating positions of the EU Member States when a topic is being discussed at the IMO. Once a new law concerning maritime safety and security is approved, EMSA monitors compliance with international and European laws in support of the European Commission by checking how the requirements of the legislation have been translated in practical terms.

Table 1. Accidents and pollution

Total number of ship accidents reported around European waters, 2004–2008

Year	2004	2005	2006	2007	2008	Total
Total number of accidents reported	593	659	748	990	1037	4819
of which Serious	194	233	319	471	360	1577
of which Pollution	30	21	19	24	36	130

Source: EMSA Marinfo database / Lloyds Marine Intelligence Unit.

For the sake of safety and security there is a growing need to monitor closely all ship movements in European waters and to integrate the various information systems. Comprehensive information is needed about the movement of ships, the cargo they are carrying, the interests behind these ships, their crew etc in order to optimise traffic flows, to enable a prompt response in case of an incident and to counter acts of terrorism. EMSA plays a central role, in close cooperation with the Member State authorities, in integrating the various information systems.

To counter pollution from ships, EMSA has been given a role to provide reaction to oil spills and in ship surveillance. If there is deliberate pollution, EMSA has the ability, through satellite images, to identify the polluter and inform the Member State concerned to take the appropriate action against the identified ship owner. In case of a large oil spill, EMSA has established a fleet of oil pollution response vessels that are available at very short notice to help with the Member States capabilities to clean up oil before it touches land, thus preventing an even greater environmental disaster.



ENVIRONMENTAL PROTECTION



Dealing effectively with ship waste

A vast number of ships call at EU ports, and many others pass through or close to EU waters. All of these vessels have the choice of either depositing their waste and cargo residues in port facilities or dumping them illegally at sea. In practice, they regularly do both, with potentially disastrous effects for the marine environment. This is particularly the case in semi-closed sea areas such as the Baltic, Mediterranean and Black Sea regions.

In order to ensure that ships offload such substances at appointed facilities in ports, the accessibility, adequacy and cost of such facilities to the ship owners and operators must be taken into account. Efforts to encourage ports to set up appropriate and reasonably priced facilities are backed by Directive 2000/59/EC, in tandem with the IMO's Marpol Convention on maritime pollution. Member States are given a high degree of freedom as to how the requirements are actually met. EMSA's inspectors visit Member State authorities, individual ports and even ships to obtain the best possible knowledge of how ship waste and cargo residues are handled in practice.

Alongside inspections, specific difficulties or best practices are singled out and examined, or disseminated through studies and workshops. These parallel activities generate an increasingly accurate picture of ship waste management in practice, which helps develop more effective strategies to reduce and prevent pollution from illegal discharges at sea. For example, EMSA has recently worked on the fee systems applied in Member State ports for 'green ships', which may enjoy more favourable treatment in EU ports.

Reducing air pollution

More maritime traffic also means more airborne emissions from ships. This is an issue in port cities, where ship emissions are often the dominant cause of air pollution. Ship emissions can also travel over hundreds of kilometres and contribute to air quality problems on land. Furthermore, air pollution from land-based sources is declining as measures on vehicles, industrial installations and fuels begin to take effect. The action to reduce emissions on land, often at great expense, should go hand in hand with similar efforts at sea.

Fuels used on board ships are now subject to a degree of regulation. Ceilings on the sulphur content of maritime fuels, as well as standards for sampling the fuels and requirements for reporting on the results, have been set through Directive 2005/33/EC (in tandem with the IMO's Marpol Convention). EMSA evaluates and helps enhance the impact of these measures by examining how they play out in practice, for example by testing the quality of bunker fuel in relevant EU ports and on board ships. Workshops with relevant authorities in Member States are regularly being organised to ascertain both progress and problems with regard to implementation of the rules regarding sulphur and nitrogen oxide emissions from ship engines.

A major challenge for shipping in the years to come is the reduction of greenhouse gases from ships. In this area there are no legal requirements yet, but EMSA has been requested to assist the Commission in various ways, for example in obtaining detailed information on ship movements and their emissions in order to obtain a better picture of the current CO₂ emission situation. Such data will be used as a basis for potential future international or European legislation in the field.

In the context of EU policies, initiatives have also been taken in the field of ships' paint (anti-fouling systems), ballast water management, liability and compensation for pollution damage and environmentally-sound ship recycling. In all these fields, EMSA's activities have contributed to shaping an EU approach to these environmental threats.

Controlling scrapping — from cradle to grave

At the end of their working lives, vessels are dismantled in order to recover their main component: steel. This process allows for the recycling of valuable materials and contributes to the rejuvenation of the active fleet, and thus to efficient and safe transport. However, these so-called End of Life ships also contain a plethora of hazardous substances, and thus the scrapping of ships requires oversight.

How these substances are disposed of during the dismantling process has been the subject of growing international concern. The environmental and working conditions of the 'scrapping beaches' in South Asia, which receive the bulk of the world's obsolete vessels, have been in recent years been strongly criticised. Furthermore, the rate at which vessels are decommissioned is expected to increase considerably as a result of declining market conditions on the one hand, and increasingly stringent ship safety standards on the other, notably the imminent 2010 deadline for the phasing-out of single-hulled tankers.

As momentum for a regulatory response to the environmental, health and safety issues related to ship scrapping builds, EMSA is gathering technical expertise, for instance on options and standards for the certification of ship recycling facilities, to help shape both an EU-wide strategy for ship dismantling and the planned IMO Convention on this topic.

Training and cooperation

EMSA maintains a comprehensive maritime safety training and cooperation programme, aimed at improving knowledge of EU maritime safety legislation. The beneficiaries of the training are mainly officials who work in the maritime administrations of EU/EEA Member States. The training programme, which is established annually in close co-operation with the Member States, now comprises more than 20 seminars, workshops and expert visits per year. The Agency also provides training and support to countries that are candidates or potential candidates for EU membership.

IMPROVED CONTROL OF CONSTRUCTION

To ensure that ships are built and maintained according to the latest safety requirements, their design, construction and maintenance must be approved based on inspection and certification procedures that have been developed at international level.

This responsibility lies with the countries which register ships (flag states) for the vessels under their jurisdiction. Countries can also authorise classification societies to perform these tasks on their behalf. Classification societies are multinational bodies which issue many different types of certificate within two main categories: 'certificates of class' covering compliance with the rules of the societies themselves; and 'statutory certificates' covering compliance with international regulations. Although there are more than 50 organisations engaged in this work worldwide, only 13 classification societies are currently recognised by the European Union including all the large societies, which survey and certify vessels representing over 90 % of the world's cargo carrying tonnage. EU Member States are only allowed to delegate their ship inspection and certification responsibilities to these 13 recognised organisations.

The main EU legislation which deals with classification societies is Directive 94/57/EC, as amended, which lays down a number of important criteria for the recognition of organisations. To ensure that these recognised organisations maintain the quality standards and continue to fulfil the criteria laid down, each organisation must be assessed every two years. EMSA has been tasked by the Commission to carry out this verification and, to do so, its assessors visit the head offices of classification societies, together with a selection of their regional and/or local offices, as well as individual ships and shipbuilding sites worldwide. EMSA's inspection teams carry out an average of generally 20 inspections per year. Following inspections, EMSA reports its findings to the European Commission. The Commission may require corrective action and/or impose fines if serious failure or a sustained problem is established.

Consistency of Port State Control

EU port states have the task of inspecting foreign ships that visit them (port state control). This port state control process is of particular importance to maritime safety, because even though flag states have the primary responsibility for the good condition of their ships, they are not always able to carry this out in a consistent way. Port states have the power to require that the necessary remedies to identified deficiencies be applied, and may detain vessels until these have been completed. Should a ship be detained repeatedly within a certain period of time, access to all EU ports can be denied until the ship owner has demonstrated that the ship is in appropriate condition to sail (the so-called 'banning provision').

Port state control is one of the areas where EMSA operates on behalf of the European Commission and hand-in-hand with the Member States. It also interacts closely with the Paris Memorandum of Understanding, which consists of 27 participating maritime administrations and aims at harmonised port state control throughout the waters of the European coastal states and the North Atlantic.

Table 2. Classification societies assessed by EMSA

A. Full EU recognition	Tonnage (DWT)	% of fleet	No. of ships	% of fleet
Nippon Kaiji Kyokai – NK (JP)	229 740	22.5%	6 086	15.8%
Lloyd's Register of Shipping – LR (UK)	184 790	18.1%	5 501	14.3%
American Bureau of Shipping – ABS (US)	176 430	17.3%	5 648	14.7%
Det Norske Veritas – DNV (NO)	164 780	16.2%	4 055	10.5%
Germanischer Lloyd – GL (DE)	86 510	8.5%	4 899	12.7%
Bureau Veritas – BV (FR)	74 690	7.3%	4 940	12.8%
Korean Register of Shipping – KR (KR)	39 090	3.8%	1 623	4.2%
China Classification Society – CCS (CN)	38 370	3.8%	1 906	4.9%
Russian Register of Ships – RS (RU)	13 510	1.3%	2 573	6.7%
Registro Italiano Navale – RINA (IT)	12 660	1.2%	1 314	3.4%
Total	1 020 560	100%	38 545	100%
B. Limited EU recognition				
Polski Rejestr Stratkow – PRS (PL)	1 760	76.2%	237	48.2%
Hellenic Register of Shipping – HRS (EL)	500	21.6%	213	43.4%
Registro Internacional Naval Portuguesa - RINA VE (PT)	50	2.2%	41	8.4%
Total	2 310	100%	491	100%

AND MAINTENANCE

For years individual Member States were required to inspect at least 25% of the number of ships calling at their ports, in accordance with EU Directive 95/21/EC. Following a thorough review of this Directive a new inspection regime will be introduced.

A decisive element in this regime is a shift away from commitments for the individual participating states to regional commitments. The new regime aims at inspecting all ships calling the EU region at least once per year, and secondly the new regime aims to improve the transparency of the industry by highlighting the responsible parties involved in shipping. The existing method of ranking flag states and recognised organisations will be complemented with a similar system for companies.

This change to regional commitments will both ensure and require further harmonisation of working procedures by the Member States. Harmonisation will optimise the use of available resources by targeting poor-performing ships throughout the region and, at the same time, reducing the burden of over-inspecting well-performing ships.

EMSA has been tasked, in close collaboration with the Member States, to develop, implement and operate a database in support of the new regime. This system will be embedded in the daily operations of all port states and will be a key element in the proper regional functioning of port state control.

To enable this approach to function consistently, the importance of properly trained and qualified port state control officers has been emphasised and recognised by both the industry and the Member States. The success of a uniform regime will be ensured through further harmonisation of inspection criteria, reporting procedures and training principles. The Agency organises the necessary training on port state control procedures, using, inter alia, the lessons learned from the visits to Member States. The development by EMSA of a state-of-the-art distance learning tool for port state control officers employed in the region also aims at further raising levels of professionalism.

Table 3. Paris MoU port States's individual contribution to the total amount of inspections.

MoU Port State	Individual ships	Inspections	Inspections with deficiencies	Detentions	Detentions with RO-related deficiencies	% inspections with deficiencies	% detentions	% individual ships inspected (25 % commitment)	% inspections of MoU total
BE	5246	1481	843	70	17	56.92	4.73	28.23	6.01
BG	1362	528	397	30	5	75.19	5.68	38.77	2.14
CA ¹	1739	553	208	23	7	37.61	4.16	31.80	2.24
HR	1490	401	289	33	4	72.07	8.23	26.91	1.63
CY	1059	329	212	55	4	64.44	16.72	31.07	1.33
DK	2436	659	314	23	2	47.65	3.49	27.05	2.67
EE	1571	383	125	4	0	32.64	1.04	24.38	1.55
FI	1332	492	138	3	0	28.05	0.61	36.94	2.00
FR	5889	1780	1087	91	5	61.07	5.11	30.23	7.22
DE	5427	1403	784	47	6	55.88	3.35	25.85	5.69
EL	3075	1003	439	45	12	43.77	4.49	32.62	4.07
IS	382	103	33	1	0	32.04	0.97	26.28	0.42
IE	1390	435	202	30	4	46.44	6.90	31.29	1.76
IT	6567	1929	1270	212	30	65.84	10.99	29.37	7.83
LV	1864	515	229	5	0	44.47	0.97	27.63	2.09
LT	1406	441	325	9	0	73.70	2.04	31.37	1.79
MT	817	294	223	21	4	75.85	7.14	35.99	1.19
NL	5820	1633	873	41	2	53.46	2.51	28.06	6.63
NO	2343	734	269	22	4	36.65	3.00	31.33	2.98
PL	2343	789	447	33	1	56.65	4.18	33.67	3.20
PT	2684	986	529	39	8	53.65	3.96	36.74	4.00
RO	1907	1101	811	31	3	73.66	2.82	57.73	4.47
RU ²	3325	1470	953	54	7	64.83	3.67	44.21	5.96
SL	779	298	113	53	14	37.92	17.79	38.25	1.21
ES	6608	2324	1620	165	24	69.71	7.10	35.17	9.43
SE	2686	763	262	9	0	34.34	1.18	28.41	3.10
UK	6478	1820	1327	71	11	72.91	3.90	28.10	7.38
Total	78025	24647	14322	1220	174	58.11	4.95	31.59	100.00

1. Only East Coast of Canada 2. Excluding Black Sea Ports (Novorossiysk Sochi and Tuapse)

Source: Paris Memorandum of Understanding, 2008 Data.

In 2007, EMSA provided the inspectors of the Paris MOU region with Rulecheck, an electronic tool that provides a quick reference to the entirety of international rules concerning ship safety, labour and the Paris MoU procedures in their most up-to-date version. Since the total body of rules governing ship safety is vast and complex, the availability of an electronic rule finder, which inspectors carry on their laptops, has greatly facilitated the work of the inspectors.

The effectiveness of the Port State Control system in the EU region is subject to constant monitoring by the Agency. The results of the analysis are fed back into training systems and may also lead to the adjustment of procedures and/or to future legislation.



GETTING SEAFARERS

It is estimated that around 80% of accidents at sea occur as a result of human error.

A prominent example is when those on the bridge of a ship make the wrong decisions, in particular under difficult navigation and/or weather conditions. Alternatively, they might occur as a result of the malfunctioning of engines or other equipment, which can be exacerbated by the crew's inability to correct the situation quickly due to poor training. Consequently, it is vital that seafarers are trained in accordance with the highest standards.

Roughly 75% of seafarers on EU registered ships originate from non-EU countries and obtain their qualifications in non-EU training institutions in over 50 countries. This makes it difficult to assess the quality of their education, training and qualifications. To allow for effective monitoring of this situation, the IMO's International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) gives countries which register ships the ability to verify how countries which provide seafarers for their ships implement the internationally agreed standards.

In the past, each EU Member State had to carry out the assessments of the maritime education and training systems in non-EU countries individually. In order to avoid duplication of inspections, it was decided that the work should





PROPERLY TRAINED

be undertaken centrally. The task was assigned to the European Commission, which delegated the technical work to EMSA. The assignment of a single EU body adds value by creating economies of scale and guaranteeing a consistent approach for all assessments.

EMSA's inspectors carry out an assessment of the education system of each non-EU country that provides seafarers working on board EU registered ships once every five years. In practice, with the limited means available, this means inspecting 35 or more institutions in six to eight different countries per year.

Closer to home, in 2007 EMSA started visits to EU Member States to verify how they are implementing their obligations in this area. In the same way as for the non-EU countries, visits to EU countries include inspections of the offices of the maritime administration and a sample of education and training institutions, to be inspected on a five year cycle.

The findings of the inspections are communicated to the competent national authorities and to the European Commission who has certain legal powers to require corrective action when necessary.



FIGHTING OIL POLLUTION

Oil pollution disasters may occur again in the future, and these can have a high impact on the environment, local economies and fisheries.

Increases in tanker operations – partly related to increasing oil exports - contribute to future risk levels. On the financial side, we should also bear in mind that clean up operations are costly. Well over EUR 1 billion has been spent in dealing with the consequences of the Erika and Prestige disasters alone.

The serious financial and ecological consequences of a major tanker spill can be reduced substantially by removing the oil from the sea before it washes ashore. However, the Prestige disaster in 2002 clearly demonstrated that there were not enough pollution response ships in Europe with the capacity to deal with major spills effectively.

Figure 1. Substantial pollution incidents reported around European waters, 2004–2008



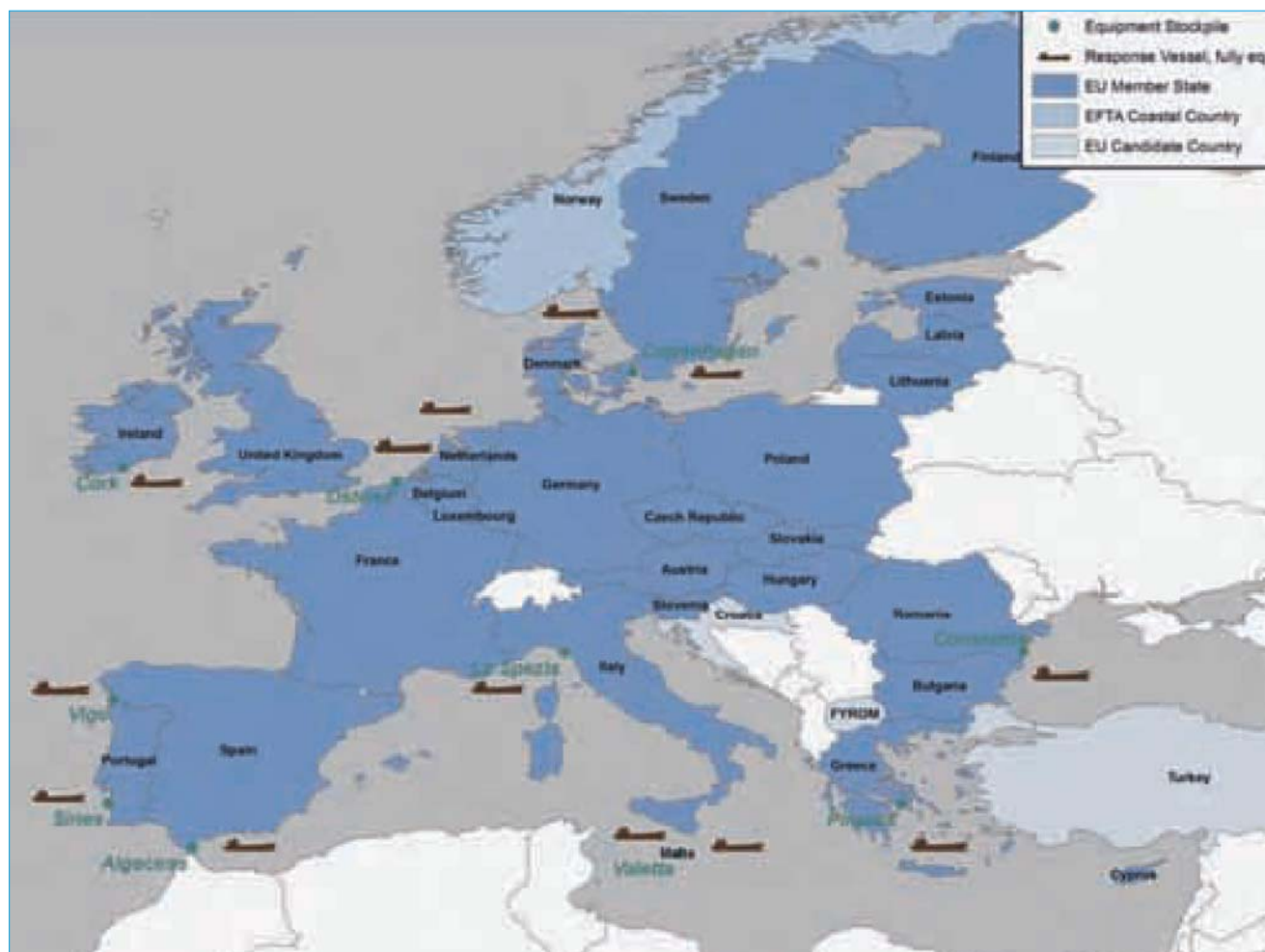
Source: EMSA Marinfo database / Lloyds Marine Intelligence Unit.

Against this background, EMSA was given responsibility for setting up a network of vessels, equipment and other resources to help Member States deal with pollution from ships. Based on an Action Plan for Oil Pollution Preparedness and Response, the Agency contracts commercial vessels which can, at short notice — normally within 24 hours — be transformed into oil recovery vessels with state-of-the-art equipment. These ships normally undertake other day-to-day tasks, but have the ability to load equipment and respond rapidly to spills when needed.





Figure 2. EMSA stand-by oil spill recovery vessels – location of stockpiles and vessels



The vessels that EMSA has under contract are large, and are there to support national response capabilities, which traditionally have a tank capacity of around 500m³, when a major incident occurs.

Since 2006 the Agency has tendered this service, and from 2009 a comprehensive fleet of Stand-by Oil Spill Recovery Vessels (OSRV) is available in all major European sea areas, from the Baltic to the Black Sea, encompassing ships available in most parts of the Mediterranean, Atlantic and North Sea. The Agency will maintain this service and optimise the vessel configuration and location as appropriate over the coming years.

More information about the technical specification of the vessels and the location of the stockpiles can be gained from [Figure 2](#) and [Table 4](#).

In order to ensure that these vessels and their crews are ready to respond to a major oil pollution incident, EMSA participates in the regular drills and exercises that are organised with the regional cooperation agreements for pollution response, namely with the partner countries who are members of the HELCOM, REMPEC and other agreements.

POLLUTION RESPONSE

Table 4. EMSA stand-by oil spill recovery vessels, and technical specification (2009)

Name	Type	Operational area and equipment depot	Tank capacity (m3)
<i>OW Copenhagen</i>	Bunker Vessel	Baltic Sea Copenhagen and Frederikshavn	4360
<i>OW Aalborg</i>	Bunker Vessel	Denmark	4360
<i>Aktea OSRV</i>	Oil Tanker	Aegean Sea Piraeus Greece	3000
<i>Forth Fisher</i>	Product Tanker	Atlantic Coast Cobh	4754
<i>Galway Fisher</i>	Product Tanker	Ireland	4754
<i>Mersey Fisher</i>	Product Tanker		5028
<i>Salina Bay</i>	Bunker Vessel	Mediterranean Sea La Spezia Italy	2800
<i>Mistra Bay</i>	Bunker Vessel	Mediterranean Sea Valetta	1805
<i>Santa Maria</i>	Bunker Vessel	Malta	2421
<i>Galp Marine</i>	Bunker Vessel	Atlantic Coast Sines Portugal	3023
<i>Bahia Tres</i>	Bunker Vessel	Mediterranean Coast Algeciras	7413
<i>Bahia Uno</i>	Bunker Vessel	Spain	3800
<i>GSP Orion</i>	Supply Vessel	Black Sea Constanta Romania	1334
<i>Ria de Vigo</i>	Supply Vessel	Bay of Biscay Vigo Spain	1522
<i>Interballast III</i>	Dredger	North Sea Ostend	1886
<i>DC Vlaanderen-3000</i>	Dredger	Belgium	2744





However it was also recognised early on, that risk assessments and further actions by the Agency are necessary to address marine pollution caused other than oil.

Clear information on how to deal with other pollutants such as hazardous and noxious substances (HNS) is difficult to obtain, and requires the involvement of chemical experts. These actions are identified in EMSA's Action Plan for HNS Pollution Preparedness and Response and are phased in gradually.

MAR-ICE

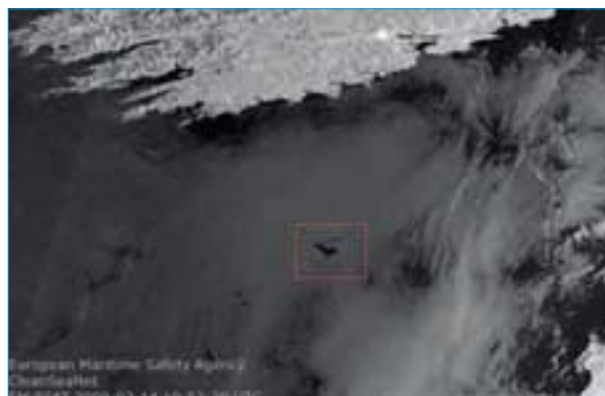
In order to strengthen the information flow in Europe in cases of marine pollution incidents involving chemicals caused by ships, the MAR-ICE Network was created in close cooperation with the chemical industry. MAR-ICE stands for the 'Marine Intervention in Chemical Emergencies Network'. It became operational at the start of 2009, and delivers an information service available to all EU Member States and coastal EFTA States for intervention in marine chemical emergencies.

CleanSeaNet

The majority of oil spills occur when tankers and other vessels clean out their oil tanks at sea. As a support service for the Member States in the fight against pollution, in 2007 EMSA set up CleanSeaNet, a satellite surveillance for oil slick detection. This practice is illegal, but was very difficult to detect, and subsequently prosecuted.

The system provides images to help with the initial identification and tracing of potential oil discharges using satellites, which is then backed-up using other types of surveillance, such as on the spot checks with patrol vessels and specialised aircrafts in the Member States.

Figure 3. CleanSeaNet image showing oilspill off Irish coast



CleanSeaNet also has an operational role in monitoring accidental pollution and support response activities when major incidents occur. The system has also been enhanced with new functions which allows it to exchange information and enhance the its functionality using the data from existing systems that EMSA operates. Traffic monitoring information from SafeSeaNet (see below) has been added, and together with weather and oceanographic information and radar satellite data, CleanSeaNet gains a clearer and more accurate picture. This allows Member States to receive from one source extensive information for pollution response actions and gain certainty when identifying the polluter.

The Agency is the the only source for the European Commission and Member States to obtain images, data and other information to support their maritime pollution response activities at the EU level. The Agency also promotes cooperation, provides training and disseminates knowledge and best practice in this area. EMSA's aim is to make an effective contribution to the protection of the entire EU coastline from accidental and deliberate spillages of oil and other pollutants.

IMPROVED VESSEL

At any given time, there are more than 20,000 commercial ships at sea in European waters.

When the Erika incident occurred in 1999, exact information concerning her cargo was not known. With so many vessels loading and unloading in Europe's ports, information about cargo, ship safety records and port destinations is of vital interest for safety at sea, protection of the marine environment and for economic actors. Yet this information is dealt with by a myriad of actors at local and national level. Very often, exchanging information is difficult because such bodies as port authorities use different ways to collate, store and transfer data, and many have incompatible IT systems. Information is transmitted in different ways, often by fax, phone or email.

That is why, since 2002, Member States and the European Commission have been working together to develop a solution to these information exchange problems and to implement EU Directive 2002/59/EC, which establishes a Community vessel traffic monitoring and information system (VTMIS). The result was a European network called SafeSeaNet, which is managed by EMSA, to harmonise the way in which maritime data is exchanged.

SafeSeaNet links together a large number of maritime authorities across Europe. The information contained in the messages is gathered from a variety of local sources, known as local competent authorities (LCAs), such as coastal stations and port authorities. This information is provided in near real time to public authorities around Europe. The European Union has the best-covered coastline with AIS (Automatic Identification System) receiving stations, picking up signals at all times from ships passing by. The Agency cooperates with Member States to improve the receiving range of these stations, with a view to achieving complete coverage of the sea areas surrounding Europe.

More accurate ship tracking will help prevent pollution incidents through early identification of vessels posing a risk. SafeSeaNet can provide reports on a vessel's behaviour (accident,



TRACKING AND MARITIME SURVEILLANCE

pollution, infringement of navigation rules etc.) or details of hazardous materials being carried by a ship. Knowing where that ship is going and what it is carrying will improve emergency response times should the worst happen. SafeSeaNet also streamlines cargo and position reporting processes in ports and on board ships which will reduce workloads and costs.

2009 will see the start of inspection visits to all coastal Member States, including the national competent authority, commercial ports and coastal stations monitoring vessel traffic, with the aim of establishing the level of control of ships carrying dangerous or polluting goods in the seas around Europe.

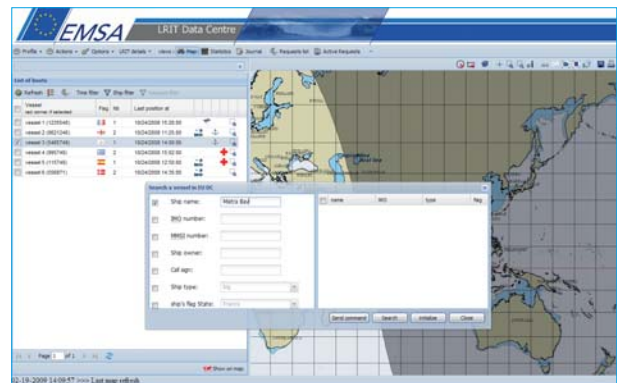
Vessel tracking beyond Europe's waters

The International Maritime Organisation adopted a decision to set up a system providing information on ships sailing anywhere around the world for safety, security, search and rescue (SAR) and environmental protection purposes. This Long Range Identification and Tracking system (LRIT) is intended to provide information on a ship at least every six hours. Each flag state, including the EU flag states, is responsible for providing these reports for ships flying its flag. Following a Council Resolution in October 2007, EMSA set up a data centre on behalf of all European flag states to disseminate LRIT information to each participating Member State and exchange information upon request with other data centres around the world. Operational from mid 2009, the EU LRIT Data Centre is the biggest data centre of the whole international LRIT system, tracking around 10 000 ships which generate a minimum of 40 000 position reports per day. In addition to tracking the EU-flagged ships, the EU LRIT Data Centre will also provide Member States, on request, with the LRIT information of any third country vessel bound to, or sailing within, EU waters.

Integrating maritime surveillance systems

Such systems are part of EMSA's drive to harvest and disseminate more and more information from different sources. As of 2009, the Agency will integrate these systems in order to provide Member States and the European Commission with a comprehensive image of vessel traffic in

Figure 4. LRIT Data Centre



the EU. Short and long range information will be linked. Information on ships, ship cargos, inspection results etc. contained in different databases will be pooled. Information on potential illegal discharges coming from CleanSeaNet, the Agency's European satellite oil spill detection system, will be combined with traffic information for the same sea area from SafeSeaNet and a real-time satellite image. Under the overall heading of Maritime Support Services, this one-stop-shop is due to operate round the clock from the second half of 2009. The Agency is thus growing towards becoming the major provider of maritime data on and for the European Union.

Following the European Commission's Blue Book Integrated maritime policy for the European Union with as its cornerstone, the Ten year maritime transport strategy and the subsequent initiatives in the field of maritime surveillance, the Agency will further develop its working relations with other EU Agencies and European initiatives for sharing ship-related information. Where possible the Agency will participate in ongoing activities aimed specifically at creating a European network for maritime surveillance. It will support the Commission by offering the technical expertise gained in developing SafeSeaNet and other relevant maritime applications. And it will review its maritime information systems to enable dissemination of information to other EU bodies and Agencies for the purposes of maritime surveillance.



OUTLOOK FOR 2015

EMSA is a relatively young Agency. It was only in May 2003 that a pioneer group of six people began its first activities. A lot of progress has been made in its first five years, to create an organisation capable of carrying out the tasks entrusted to it by the EU legislator. The year 2006 was of particular significance because it saw the Agency move from Brussels to Lisbon, Portugal, the seat of its official headquarters.

All activities related to the proper implementation of EU legislation in the field of maritime safety and pollution prevention have remained a priority. As we approach 2010, the Agency has been considerably strengthened, and its core tasks have been consolidated and expanded. The year 2009 marks a second symbolic milestone, with over 200 staff members moving to permanent, purpose-built offices in the centre of Lisbon.

Finding solutions to common problems, in continuous dialogue with experts of Member States, the European Commission and, where appropriate, industry, is at the very heart of the Agency's activities. This is a very dynamic process, as new Member States become an integral part of activities and the breadth of subjects that call for a common approach at international and EU level expands.



Several new proposals for policy and legislative developments in the EU are well underway, and their adoption in the future is expected to impact directly on the work of the Agency.

In this vibrant context, the run-up to 2015 is likely to bring both new tasks and the expansion of existing tasks. In the field of maritime surveillance in particular, EMSA has developed strong capabilities in the cross-fertilisation and the analysis of data. EMSA is fast becoming the central facilitator and provider of maritime information. And wherever the activities of a range of authorities and services touch upon each other — maritime safety, border control, defence, fishing — there is scope for further developments, strengthened cooperation and integration. By working together, we can achieve our common goal of quality shipping, safer seas and cleaner oceans.

How to obtain EU publications

EU publications are available from EU Bookshop (<http://bookshop.europa.eu>), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.

Image credits

EMSA staff, José R. Rodríguez Montero, Pembrokeshire Coast National Park Authority/Tiv Thomas, Marine Photobank/Russian Doors, Flickr Creative Commons/a.o. Micke-fi, shaire productions, enidanc, Pembrokeshire Dave, Superlative Retrospectiveness, Håkan Dahlström, Mr Hayata.

European Maritime Safety Agency

Safer and Cleaner Shipping in the European Union
Luxembourg: Office for Official Publications of the
European Communities

2009 — 20 pp. — 21.0 x 29.7 cm

ISBN 978-92-95032-25-5

About EMSA

The European Maritime Safety Agency is one of the European Union's decentralised agencies.

Based in Lisbon, the Agency provides technical assistance to the European Commission in the development and implementation of EU legislation on maritime safety. It has also been given operational tasks in the field of oil pollution response, satellite monitoring and in the long-range identification and tracking of vessels.



www.emsa.europa.eu

