EMSA vessels during international exercises

The individual oil storage capacity of the EMSA contracted vessels ranges from 1,800 m3 to 9,889 m3 and they provide a total increase in capacity across the EU network of more than 50,000 m3. The map below provides an overview of the available vessels and the geographical location of the associated equipment stockpiles.

To maintain the quality of the at-sea oil recovery service, all vessels and crews undergo regular equipment drills under the supervision of the Agency. To work under an international command and control structure, which is the most likely scenario during a major spill, each vessel is available to participate in regular at-sea spill response exercises.

In the near future, it is expected that the network will be extended to the Black Sea. The completed network will provide an effective "European tier" of pollution response vessels for the protection of the European coastline.

Network of EMSA vessels and equipment stockpiles

Further Information

The EMSA website contains further information on this and all the other activities of the Agency, and it can be accessed at: **http://www.emsa.europa.eu**

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EMSA

EFFECTIVE AT-SEA POLLUTION RESPONSE

EUROPEAN MARITIME SAFETY AGENCY

THE **GLOBAL** ISSUES

In terms of volume, merchant shipping is the most important mode of transport to Europe and the rest of the world. More than 90% of European Union external trade travels by sea and more than 1 billion tonnes of freight a year are loaded and unloaded in EU ports. However, this does not come without risk and significant effort is being applied to ensure that, following recent initiatives, tanker accidents continue to decrease within an environment of significantly increasing volumes transported.

The *Torrey Canyon* (UK, 1967) accident marked the real beginning of public awareness of the adverse impacts of oil pollution disasters. The *Amoco Cadiz* (France, 1978) later reminded people of the significant exposure of the EU coastline to pollution, while further afield, the *Exxon Valdez* (USA, 1989) triggered worldwide public outrage. Since then, numerous accidents (see table below) have demonstrated the continued risk of major oil pollution in European waters.

Tanker Spills >10,000 Tonnes since 1989

Date	Name	Tonnes	Country
1989	KHARK 5	80,000	Portugal/Morocco
1989	ARAGON	25,000	Portugal
1990	SEA SPIRIT	10,000	Spain/Morocco
1991	HAVEN	144,000	Italy
1992	AEGEAN SEA	73,500	Spain
1993	BRAER	84,000	United Kingdom
1994	NASSIA	33,000	Turkey
1994	NEW WORLD	11,000	Portugal
1996	SEA EMPRESS	72,360	United Kingdom
1999	ERIKA	19,800	France
2002	PRESTIGE	63,000	Spain

The environmental and socio-economic damage caused by an oil spill is determined by a range of factors including the type of oil spilled; the amount and rate of spillage; the weather and sea conditions; the physical, biological and economic characteristics of the spill location and the effectiveness of response operations. Oil contamination can seriously affect mariculture (eg fisheries), wildlife (eg sea birds), amenities (eg tourist beaches) and the coastline in general. The overall socio-economic cost of oil pollution disasters is difficult to assess, but runs into billions of euros.

The environmental impact caused by marine oil spills is often very significant in both the short and long term. Consequently, mitigating the environmental and socio-economic damage caused by such events is a fundamental objective of marine pollution response operations. Minimising the amount of the oil hitting the shoreline is the most obvious solution to this challenge and therefore it is in this area that EMSA provides its main support.

THE **EMSA** ROLE

The Requirement

In May 2004, with the entering into force of Regulation 724/2004/EC, EMSA was given the task of providing support to Member States in their efforts to respond to ship-sourced pollution in EU waters. In order to define the framework for the associated support activities, the Agency developed the Action Plan for Oil Pollution Preparedness and Response (2004). The plan is updated regularly as part of the Agency's annual Work Programme.

EMSA "Top-Up" Pollution Response Resources

The primary responsibility to react to, and to co-ordinate the response to, an oil pollution incident rests with the affected Member State(s). As major spills frequently concern more than one country, various regional arrangements have been set in place to cover co-operation and assistance in such cases. EMSA provides an additional "top-up" tier to these arrangements and to the Member States.

Pollution disasters on the scale of those in the table, including the most recent cases of the *Erika* (1999) and the *Prestige* (2002), illustrate that individual coastal states can not reasonably be expected to have sufficient resources to mount an appropriate response by themselves. European co-operation is required, and it is within this framework that EMSA provides its assistance. For major spills, generally the most appropriate response is to recover the oil at sea before it reaches the coastline, as this significantly reduces the environmental damage.

At the practical level, an EU level mechanism has been set up to enable coastal states to request additional response equipment and resources from other EU/EFTA countries or from EMSA. This mechanism is operated by the Monitoring and Information Centre (MIC) based in Brussels, Belgium, which is managed by the European Commission (Directorate General for the Environment).

The Erika and Prestige spills were huge environmental disasters

Following a request via the MIC from an EU Member State, an EU Candidate Country, an EFTA country or the European Commission, EMSA provides assistance on the following basis:

- The Agency resources are a "reserve for disasters" to assist Member States in responding to an incident which is beyond national capabilities.
- The Agency resources are put under the operational command of the affected Member State for the duration of the emergency.
- The Agency resources have been established in a cost efficient manner.

The Service: Pollution Response Vessels

Experience acquired during previous major oil spills has shown clearly that mechanical at-sea oil "containment and recovery" is the most appropriate technique for removing spilled oil from the marine environment. To provide support for this type of activity, EMSA has established contracts for at-sea oil recovery services around the European coastline with commercial vessel operators. Each contract is for three years and can be renewed once. Given that the EMSA service is to "top-up" available resources for major spills and for cost efficiency reasons, it was not seen as appropriate to build or buy dedicated vessels to be on permanent stand-by.

The contracted vessels will, under normal circumstances, carry out their normal commercial activities. However, in the event of an oil spill, and following a request for assistance from a Member State, the nominated vessel will cease its normal activities and, at short notice, be transformed into and operate as a certified oil recovery vessel.

Appropriate modification/pre-fitting to the vessels has been carried out in order to ensure that the specialised oil spill response equipment can be installed rapidly onboard and be operated safely by the crew.

Each arrangement has the following common characteristics:

- The vessel will operate as an oil recovery vessel on the basis of a pre-agreed model contract with fixed fees and conditions as developed by the Agency in consultation with Member States for this purpose.
- The contractor is obliged to react positively to all requests for assistance to respond to an oil spill, regardless of the spill location.
- The primary oil recovery system is based around the "sweeping arm" concept with an alternate "ocean going boom and skimmer" system also available. The requesting Member State can select the equipment in accordance with the incident characteristics.
- Each vessel has a speed over 12 knots for prompt arrival on site.
- Each vessel is equipped with a local radar based oil slick detection system to facilitate the positioning of the vessel in the thicker oil slicks.
- Each vessel has the manoeuvrability required to carry out oil recovery operations.
- Each vessel is able to decant excess water thus maximising the utilisation of the onboard storage capacity.
- Each vessel has the ability to heat the recovered cargo and utilise high capacity pumps in order to facilitate the discharging of heavy viscous oil mixtures to shoreside facilities as designated by the Member State concerned.

The Service: Additional Response Capacity for Europe

Following a period of phasing-in, the service network now has resources based in the Baltic Sea, along the Atlantic coastline and in the Mediterranean Sea. It is important to note that, independent of their area of commercial operations, all vessels are available to respond to a spill anywhere in European waters.

It is important to recover oil at sea before it hits the coast

EMSA vessels deploying rigid (left) and flexible (right) sweeping arm systems