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**MEDITERRANEAN ACTION PLAN (MAP)  
REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THE  
MEDITERRANEAN SEA (REMPEC)**

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10<sup>th</sup> Meeting of the Focal Points of the Regional  
Marine Pollution Emergency Response Centre  
for the Mediterranean Sea (REMPEC)

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**POLLUTION, PREPAREDNESS AND RESPONSE ACTIVITIES**

**(Submitted by the European Maritime Safety Agency (EMSA))**

**SUMMARY**

**Executive Summary:** This report concerns the financial execution of the detailed plan (Action Plan) for the European Maritime Safety Agency's (EMSA) pollution preparedness and response activities and gives an update of the status of all actions funded under the plan.

**Action to be taken:** *For information only.*

**Related documents:** REMPEC/WG.32/8/1





# European Maritime Safety Agency

Pollution Preparedness  
and Response Activities

January 2011

EMSA's 2010 Report to the European Commission and the Administrative Board regarding Regulation No. 2038/2006/ (EC) on the multi-annual funding of the Agency's pollution preparedness and response activities





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## 1. REPORT OBJECTIVE

The European Maritime Safety Agency (EMSA) shall submit a report to the Commission and the Administrative Board, by 31 January each year, concerning the financial execution of the detailed plan (Action Plan) for the Agency's pollution preparedness and response activities and give an update of the status of all actions funded under that plan (Regulation 2038/2006/EC<sup>1</sup>, Article 7).

### 1.1 EXECUTIVE SUMMARY

The activities of the Agency in the field of marine pollution preparedness and response are focussed on providing operational assistance and information to Member States. The main service 'pillars' are:

- The Network of Stand-by Oil Spill Response Vessels (SOSRVs) distributed along the European coastline;
- CleanSeaNet; the satellite based oil spill monitoring and detection service covering European waters;
- The MAR-ICE Information Service in case of chemical spills at sea;
- Cooperation and coordination with Member States, Regional Agreements and the IMO;
- The provision of information through publications and workshops.

Following a successful procurement procedure in 2010, the stand-by oil spill response service network continues to cover all the regional seas of Europe. The tanker *Alexandria*, based in Limassol (Cyprus) will reinforce the Network in the Eastern Mediterranean.

The icebreaker *Kontio* and the tanker *Sara*, contracted in 2009, became fully operational. The *Sara* is based in Portland, UK, and strengthens the response capacity in the English Channel. During the "ice breaking" season, the *Kontio* operates in the Gulf of Bothnia, whilst for the remainder of the year it is stationed along with the specialised oil spill response equipment stockpile in Helsinki, Finland.

2010 also saw the renewal of four contracts awarded in 2007 for response capacity on the Atlantic Coast, and in the Western and Central Mediterranean and Aegean Sea.

EMSA conducted an internal study to review the operational effectiveness of the Network and concluded that - depending on the accident scenario - the Network of SOSRVs can substantially reduce the impact of a major oil pollution incident. The Network provides adequate coverage for shipping incidents along almost the entire EU coastline, although some areas are less well covered and call for strengthening.

Following the well blowout of the platform *Deepwater Horizon*, EMSA closely monitored the evolving incident and provided valued daily reports to the Commission and Member States. Furthermore, and in cooperation with the European Commission's Monitoring and Information Centre (MIC), EMSA offered and provided spill response equipment to the US Coast Guard.

CleanSeaNet, the Agency's satellite oil pollution and vessel detection monitoring service, has been operational since 2007. In 2010, the 2<sup>nd</sup> generation of the service was implemented. The new service went live on 13 December 2010 and will become fully operational in February 2011. Iceland and Turkey will become the 25<sup>th</sup> and 26<sup>th</sup> coastal State to use CleanSeaNet.

The Consultative Technical Group for Marine Pollution Preparedness and Response (CTG-MPPR), established in 2007, continued its work in 2010 with its annual meeting, updating the Rolling Work Programme activities, continuing the EMPOLLEX expert exchange programme and hosted two workshops.

With regard to responding to "chemical" spills<sup>2</sup>, the MAR-ICE Network (Marine-Intervention in Chemical Emergencies Network), established in 2008, continued providing information during actual HNS spills and in support of table top pollution exercises.

<sup>1</sup> Regulation 2038/2006 of the European Parliament and the Council on multi-annual funding for the action of the European Maritime Safety Agency in the field of response to pollution caused by ships and amending Regulation 1406/2002 published on 18th December 2006.

<sup>2</sup> Action Plan for HNS (Hazardous and Noxious Substances) Pollution Preparedness and Response as adopted by EMSA's Administrative Board in June 2007. It can be downloaded from the EMSA website: <http://www.emsa.europa.eu>.

FUNDING OF ACTIONS

For 2010, the Budgetary Authorities provided the Agency with € 20.5 million in commitment and € 17.5 million in payment appropriations for its pollution preparedness and response task. In terms of budget execution, 99% was achieved for commitments and 83% for payments<sup>3</sup>.

While the overall execution in commitment appropriations was nearly 100%, the execution in payment credits was lower (83%). The latter can be explained by the fact that in some cases companies did not deliver services in line with the time limits indicated in their contracts and therefore payments were reduced accordingly.

The table below provides an overall summary of commitments and payments:

	COMMITMENTS	%	PAYMENTS	%
TOTAL allocation	20,500,00.00	100.00	17,500,000.00	100.00
TOTAL utilised	20,329,965.62	99.17	14,534,489.07	83.05

The vast majority of appropriations (98%) are spent on contracted operational pollution response services provided by EMSA in support of Member States. Actions in the fields of cooperation and coordination and information, in spite of the broad range of activities, are mostly provided through EMSA staff and have a significantly lower impact on external expenditures.

	COMMITMENTS	%	PAYMENTS	%
Operational allocation	19,916,853.60	97.97	14,286,168.84	98.29
Cooperation and coordination	93,694.69	0.46	61,897.70	0.43
Information	168,417.33	0.83	78,617.33	0.54
Related missions of EMSA staff	151,000.00	0.74	107,805.20	0.74

<sup>3</sup> The figures in this report are based on preliminary figures available at the end of 2010. They are subject to verification and confirmation as part of the final accounts of the Agency, which will be checked by the Court of Auditors. Therefore, the final figures may deviate from the figures presented in this report.

2. INTRODUCTION

The European Maritime Safety Agency (EMSA) was established<sup>4</sup> to address a broad range of maritime issues with the overall purpose of ensuring a high, uniform and effective level of maritime safety, maritime security, prevention of pollution and response to pollution by ships within the European Union. Following the sinking of the oil tanker *Prestige*, the Agency was given additional tasks in the field of marine pollution preparedness and response in 2004. The initial framework for such activities was described in the Action Plan for Oil Pollution Preparedness and Response<sup>5</sup>. The activities identified in the Action Plan are updated annually by the EMSA Administrative Board as part of the annual Work Programme. With the adoption of Directive 2005/35/EC as amended on ship-sourced pollution<sup>6</sup>, the task of monitoring spills was elaborated and incorporated into the Action Plan. The Agency's activities build upon existing cooperation frameworks and regional agreements.

On the basis of a Commission proposal, the European Parliament and the Council adopted Regulation 2038/2006/EC, which reserves a financial envelope for the implementation of these tasks for the duration of the current 2007-2013 Financial Perspectives<sup>7</sup>. As part of the provisions of this multi-annual financing framework, the Agency is requested to present annually the financial execution of its plan and the status of all funded actions. This is the fourth annual report and covers the year 2010. EMSA's activities under the umbrella of the Multi-Annual Funding Regulation are presented, and described in more detail in these three categories:

- Operational Assistance;
- Cooperation and Coordination;
- Information.

<sup>4</sup> See Founding Regulation 1406/2002/EC, Article 1 (Objectives).

<sup>5</sup> EMSA Action Plan for Oil Pollution Preparedness and Response as adopted by the Agency's Administrative Board in October 2004. It can be downloaded from the EMSA website: [www.emsa.europa.eu](http://www.emsa.europa.eu).

<sup>6</sup> Directive 2009/123/EC of 21 October 2009 amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements (OJ L280, 27/10/09).

<sup>7</sup> A financial perspective is a seven-year spending framework of the European Union.



Commissioner Kristalina Georgieva and EMSA's Executive Director Willem de Ruiter during her visit on board of the Oil Spill Response Vessel Ria de Vigo.

In the event of an oil or chemical spill from any type of source, various socio-economic and environmental resources will be put at risk of contamination. The individual importance of such resources and the associated prioritisation for their defence during an incident is clearly within the competence of the affected Member State and maybe detailed in their national contingency plan.

EMSA's role to provide additional resources was emphasised by the new Commissioner for cooperation, humanitarian aid and crisis response Ms. Kristalina Georgieva during her visit to the Agency.

### 3. OPERATIONAL ASSISTANCE

EMSA provides two main operational assistance services to coastal States with regard to marine pollution preparedness and response:

- The Network of Stand-by Oil Spill Response Vessels (SOSRVs) distributed along the European coastline tasked to recovery oil from the sea surface;
- CleanSeaNet; the satellite based oil spill monitoring and detection service covering European waters.

#### 3.1 NETWORK OF STAND-BY OIL SPILL RESPONSE VESSELS

Since 2004, the Agency has been making available additional at-sea oil recovery resources to assist Member States responding to large scale incidents such as the *Erika* (1999, France) and *Prestige* (2002, Spain). The Network of Stand-by Oil Spill Response Vessels, which provides an at-sea oil recovery service, has been built up and maintained through annual procurement procedures starting in 2005. Accordingly, 2010 saw three main activities in relation to the Network namely:

- Bringing into operation those (2) vessels contracted at the end of 2009;
- Adding capacity of the existing service through public procurement procedures for the East Mediterranean and Bay of Biscay areas<sup>8</sup>;
- Determining if the contracts established in 2007, 1 for the Atlantic Coast and 3 for the Mediterranean Sea, should be renewed for an additional (and final) 3-year period.

<sup>8</sup> The tender for the Bay of Biscay was not successful.

Associated activities included:

- Maintaining the service level for operational contracts primarily through:
  - Monitoring and evaluation of vessel/crew performance during quarterly drills;
  - Participation of the contracted vessels in operational at-sea exercises, organised in cooperation with EU member states and/or Regional Agreements<sup>9</sup>.
- Identifying and implementing appropriate technical improvements to the Network, and developing projects to upgrade the management of the service as a whole.

It is worth reviewing the key considerations behind this particular service to coastal States. Mindful of the principle of “subsidiarity” and the roles and responsibilities of Member States, this operational service should be a “logical part” of the marine pollution response mechanisms of coastal States requesting support i.e. it should “top-up” the national response capacity of the affected Member State. It is clear that Member States have the prime responsibility regarding response to pollution incidents in their waters. Consequently, the State requesting assistance will have the EMSA resources at its disposal under its operational control. Importantly, the Network of pollution response vessels is provided in a cost-efficient manner and will be channelled to requesting states through the MIC.

In the field of marine pollution response, the “tiered response” approach founded on cooperation and mutual support reflects the spirit of the International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC 1990), as ratified by the majority of coastal Member States. Accordingly, EMSA pollution response vessels can be seen as a “European tier” to provide assistance to coastal states on the basis that these Agency resources are:

- A “reserve for disasters” to assist Member States responding to an incident beyond national capabilities;
- Under the operational command of the affected Member State;

<sup>9</sup> “Regional Agreements” refer to the agreements signed by countries around a particular sea area to plan for pollution preparedness and coordinate responses in case of a large-scale marine pollution incident. The EU has an official role in some, but not all, of these. Regional Agreements have been developed for all the sea areas along the European coastline: the North Sea (Bonn Agreement), the Baltic Sea (HELCOM), the Mediterranean (the Barcelona Convention), the Black Sea (Bucharest Convention for which EMSA has observer status), and the North East Atlantic (Lisbon Agreement, not yet in force).

- Provided in a cost efficient manner;
- Utilise “state of the art” large scale at-sea oil recovery technology.

Using the experience acquired from previous major oil spills, the most appropriate approach at the European level is to remove the spilled pollutant from the marine environment using mechanical at-sea oil recovery techniques. The main concept of the service, provided through the Agency, is to ensure the availability of commercial vessels (for example bunker and product tankers) to carry out at-sea oil recovery services following a request for assistance from a coastal State.

Such vessels are “pre-fitted” and certified for oil recovery operations by an appropriate Classification Society (Recognised Organisation in accordance with Directive 94/57/EC<sup>10</sup> as amended). Following a spill, and the associated request for assistance from an affected Member State, a vessel ceases its normal commercial activities and is transformed rapidly into a fully operational spill response vessel.

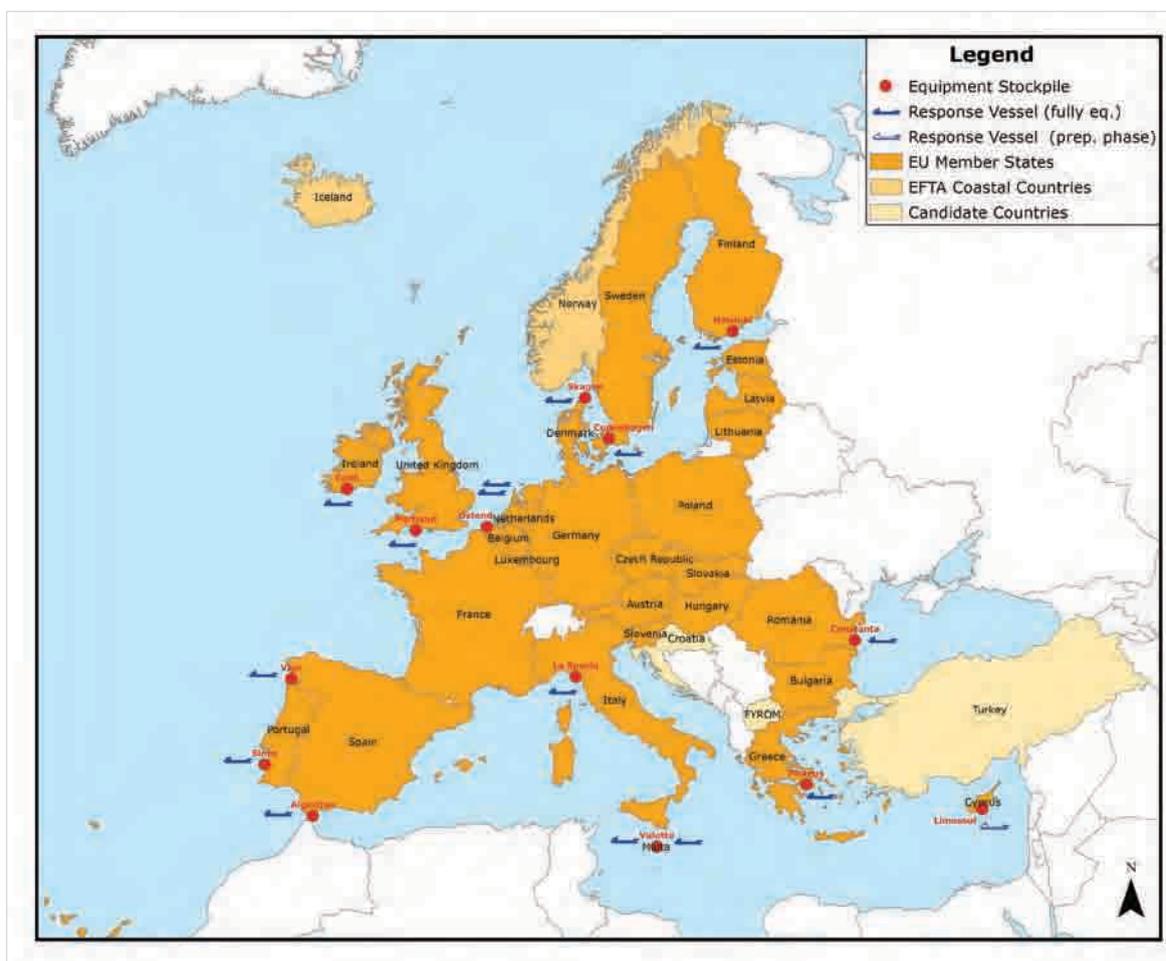
### 3.1.1 Network of Stand-by Oil Spill Response Vessels

Within the framework of the Agency’s annual Work Programme, 2010 saw further procurement procedures to maintain the service network. A “Negotiated Procedure following publication of a Contract Notice in the Official Journal of the European Union (OJEU)” was launched covering two different geographical areas (lots):

- The Eastern Mediterranean;
- The Atlantic Coast – Bay of Biscay.

As in previous years, the Negotiated Procedure had three different phases and is effectively a yearlong project in itself. Following the procurement procedure, one contract for response capacity was awarded for the Eastern Mediterranean. In 2011 another effort will be made to secure response capacity in the Bay of Biscay area.

<sup>10</sup> Council Directive 94/57/EC as amended of 22 November 1994 on common rules and standards for ship inspection and survey organizations and for the relevant activities of maritime administrations, OJ L 319, 12.12.1994, p. 20.



The Network of Stand-by Oil Spill Response Vessel Service at end of 2010.

In parallel, two companies contracted at the end of 2009 successfully completed the preparatory phase of their contracts with the Agency. Specifically, this meant that two vessels were modified, equipped and crews trained for their pollution response task. Following certification of the vessels for oil recovery operations by an appropriate Classification Society (Recognised Organisation in accordance with Directive 94/57/EC as amended), the vessels were accepted into the Stand-by Phase of the contract and are available to respond to a request from a coastal State for assistance.

The current Network provides at-sea oil recovery services from vessels based in all the regional seas of Europe. It should be noted that the vessels are at the disposal of all Member States regardless of their actual area of operation. The map above shows the distribution of vessels and stockpiles around Europe. Short descriptions of recent developments in the Network are presented below on

a regional sea basis. More technical and operational specifications of all the contracted services are available on the Agency website <http://www.emsa.europa.eu>.

EMSA currently maintains contracts for 15 fully equipped Stand-by Oil Spill Response Vessels (SOSRVs), which are available, upon request, to assist coastal States in oil spill recovery operations. One additional contracted vessel is currently in the preparatory phase and is expected to be operational by mid-2011, bringing the total number of available vessels to 16. The average storage capacity for recovered oil of the EMSA contracted vessels is 3,600 m<sup>3</sup>.

### MEDITERRANEAN SEA

Following a successful procurement procedure, a 4 year contact has been awarded for the provision of at-sea oil recovery services. The arrangement utilises the *Alexandria*,



*Alexandria, based in Limassol, Cyprus.*

a 2-year old tanker with the associated equipment stockpile located in Limassol, Cyprus. The ship is a double hulled Maltese flagged tanker built in 2008 with a speed of 13 knots and capacity for recovered oil of 7,458 m<sup>3</sup>, one of the largest under contract with the Agency. Mobilisation of the service will be facilitated by the permanent storage of oil-spill response equipment on board, rather than in a land-based equipment stockpile. She is expected to enter into the Stand-by Phase of the contract by mid-2011.

The newly-contracted vessel considerably strengthens EMSA's oil-spill response coverage of the Eastern Mediterranean Sea, a sensitive sea area given its proximity to major oil transport routes transiting the Suez Canal, and those originating in Black Sea and Middle-Eastern ports.

Three contracts established in 2007 for the vessels *Bahia Uno* (Western Mediterranean), *Salina Bay* (Central

Mediterranean) and *Aktea OSRV* (Aegean Sea) have been renewed for an additional 3-year period. Two other contracts are in place with regard to this regional sea basin for vessels based in Malta.

Once the vessel *Alexandria* enters into operation the combined net storage capacity under contract for the Mediterranean Sea will reach 22,000 m<sup>3</sup>.

#### ATLANTIC COAST

Following contract signature at the end of 2009, 2010 saw the entry in the operational phase of the bunker tanker *Sara*. The equipment stockpile, based in Portland, UK, is well placed to boost existing spill response capacity in the Western Approach of the Channel, an area well known for its vessel traffic density.



*Sara, based in Portland, UK.*

The *Sara* complements those vessel arrangements already in place along the Atlantic coast. These include the supply ship *Ria de Vigo*, which has an on board storage capacity 1,522 m<sup>3</sup> and operates out of Vigo, Spain, providing fishing monitoring services on a commercial basis to the regional government of Galicia. The arrangement based out of Sines, Portugal has been adjusted with the *GALP Marine* being replaced by the *Bahia Tres*. This is a result of external commercial considerations related to the daily activities of the vessels. The *Bahia Tres* offers 7,413 m<sup>3</sup> of on-board recovered oil storage capacity and was built in 2007.

In addition, the arrangement based out of Cobh, Ireland has been renewed for a further (and final) 3-year period.

This brings the total recovered oil storage capacity under contract in excess of 20,000 m<sup>3</sup> for the Atlantic coast from the English Channel to the Gulf of Cadiz.

#### THE BLACK SEA

Oil transportation through the Black Sea and the East Mediterranean, where important pipelines feed out of Russia and the Caspian area, pose a serious risk. The EMSA contracted vessel *GSP Orion*, operating out of Constanta, Romania, completed successfully its second year of the three year contract. It is an offshore supply vessel with a recovered oil capacity of 1,334 m<sup>3</sup> and services the Constanta oilfield area about 30–50 nautical miles offshore.



The oil recovery vessel *Kontio*, capable of operating in ice.

## THE NORTH SEA

The North Sea is one of the sea areas with the highest tanker traffic density. Following a 2008 procurement procedure, a 3-year contract was awarded for an arrangement covering two hopper dredgers trading sand along the Belgian and Dutch coastlines. The *Interballast III* (storage capacity 1,886 m<sup>3</sup>) and *DC Vlaanderen 3000* (storage capacity 2,744 m<sup>3</sup>) entered into operational service in 2009 and provide a combined recovered oil storage capacity of more than 4,500 m<sup>3</sup>.

## THE BALTIC SEA

Following contract signature at the end of 2009, 2010 saw the entry in the operational phase of the ice-breaker *Kontio*. It was built in 1987, has a speed of 18.5 knots and a recovered oil capacity of 2,033 m<sup>3</sup>. During the ice-breaking season, approx. 140 days a year, the vessel will operate in the Gulf of Bothnia with the equipment stockpile based in the port of Oulo, Finland. For the remaining part of the year the equipment and vessel will be located in Helsinki, Finland.

The additional capacity of this vessel brings the total contracted on board storage capacity for oil recovered during response operations for the Baltic Sea to more than 10,500 m<sup>3</sup>.

## FINANCIAL OVERVIEW: VESSEL CONTRACTS

	COMMITMENTS	PAYMENTS
Contracts 2005 (Baltic Sea, Atlantic and Channel, Mediterranean Sea)	0.00	1,235,712.54
Contracts 2006 (Atlantic Coast, Mediterranean East)	0.00	642,797.92
Contracts 2007 (Aegean Sea, Atlantic Coast, Mediterranean West)	0.00	2,740,078.90
Contracts 2008 (Black Sea, North Sea, Bay of Biscay)	0.00	1,551,719.80
Contracts 2009 (North Baltic, Atlantic/Channel)	0.00	1,135,613.63
Contract 2010 (East med)	4,490,000.00	1,596,155.00
Renewal Contracts 2007	8,978,733.00	0.00
Associated activities (Tender Clarification Meetings, rating reports, experts, PAMS)	35,764.94	26,784.94
Sub-total 3.1.1	13,504,497.94	8,928,862.73

3.1.2 Maintaining the Service: Drills and Exercises

3.1.2.1 Drills

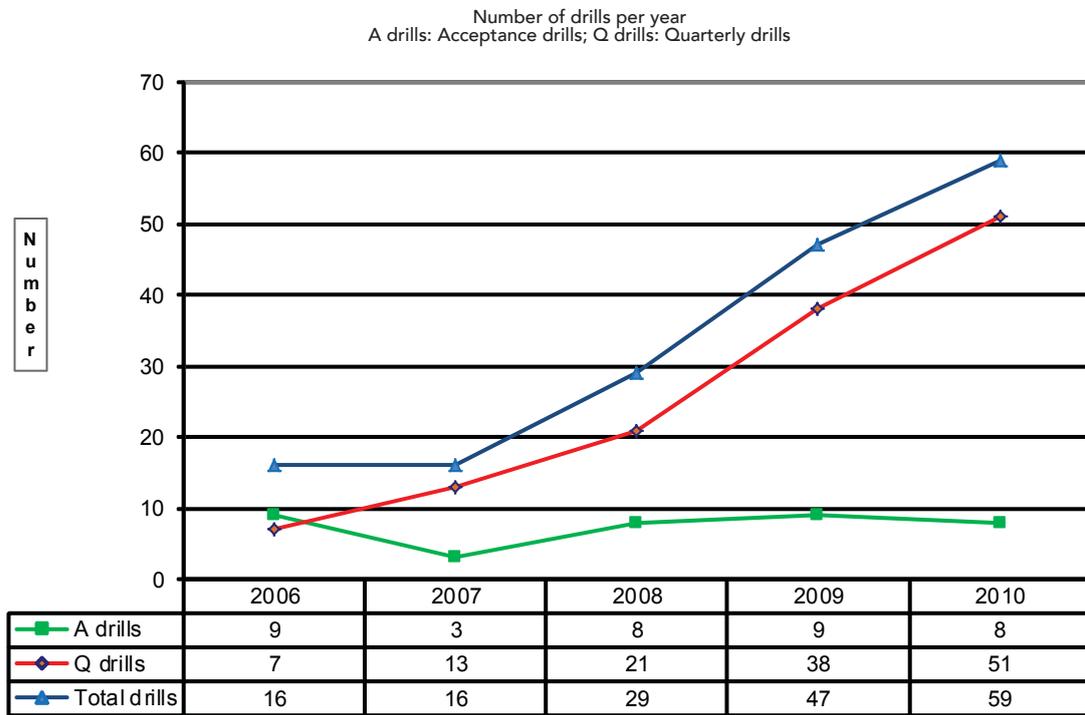
In order to maintain the appropriate level of service during the Stand-by Period of the contracts, the companies and vessels concerned carry out different types of activity. The primary activity are the vessel/crew drills which take place on a quarterly basis. In 2010, a total of 51 quarterly drills were performed by the vessels under contract to the Agency. Each drill verifies that the capability of the vessel, specialised equipment and crew is at an appropriate level.

Additionally, 8 Acceptance Drills were conducted in 2010. The Acceptance Drills are of particular importance as they are the major milestone for new vessels to enter into the Stand-by Phase of a contract as well as for any technical improvements to the Network to be recognised as operational.

The table below shows the eight Acceptance Drills conducted by the Agency in 2010:

ACCEPTANCE DRILL	REMARKS
New contracted vessel: <i>Sara</i>	Entry into Stand-by Phase of the Contract
New contracted vessel: <i>Kontio</i>	Entry into Stand-by Phase of the Contract
Back-up vessel: <i>Aegis</i>	Back-up of Aktea OSRV within EPE Contract
Replacement vessel: <i>Bahia Tres</i>	Replacement for the <i>Galp Marine</i>
Technical upgrade: <i>Bahia Uno</i>	Within the framework of contract renewal
Technical upgrade: <i>Ria de Vigo</i>	New "multi-skimmer" operational
Technical upgrade: <i>GSP Orion</i>	New "multi-skimmer" operational
Technical upgrade: <i>Aktea OSRV</i>	Upgrade of existing skimmer

The summary of drills performed by EMSA contracted vessels during the period 2006-2010 is shown in the chart below.



3.1.2.2 Exercises

In addition to the above mentioned drills, a range of exercises were conducted. These types of exercise are, in addition to being a useful method of maintaining pollution response skills, an important tool for identifying potential areas that could be improved.

At-sea operational exercises in particular greatly assist the integration of EMSA's resources within the response mechanisms of Member States, improving the necessary coordination and cooperation of the "EMSA" vessels with the coastal State response units. These exercises are, aside from being a useful method of maintaining pollution response skills, an important tool for identifying potential areas that could be improved.

In the course of 2010, 12 EMSA Stand-by Oil Spill Response Vessels participated in nine at-sea operational exercises, organised in cooperation with EU member states and/or Regional Agreements, in the Baltic Sea, North Sea, Bay of Biscay, Atlantic Coast, Mediterranean Sea, Aegean Sea and Black Sea.

At-sea operational exercises in 2010:

Operational exercises usually involve the release of (simulated) oil, the deployment of pollution response vessels from the contracting parties, the establishment of a unified command structure and communication system. In addition, full-scale oil recovery operations at the site of the accident, including actual deployment of oil containment booms and skimming equipment, may be undertaken.

In connection with the operational exercises, 11 notification exercises, aiming to evaluate the agreed emergency and notification procedures between EMSA, Member States, EMSA contractors and the EU cooperation civil protection mechanism (MIC), were organised by the Agency. As a result, 20 exercise Incident Response Contracts were signed between different Member States and EMSA Contractors.

The total number of exercise days with the participation of EMSA contracted vessels was 14.

EXERCISE NAME	DATE, LOCATION	PARTICIPATING PARTIES	EMSA VESSELS
VARNA 2010	10/03/10 Varna, Bulgaria	Bulgaria, EMSA	GSP Orion Santa Maria
SANTANDER 2010	25-27/05/10 Santander, Spain	Spain, France, MSA	Ria de Vigo
TRIENA 2010	08/06/10 Piraeus, Greece	Greece, EMSA	Mistra Bay Aktea OSRV
The Netherlands-EMSA	24/06/10 Zeebrugge, Belgium	The Netherlands, EMSA	DC Vlaanderen Interballast III
MATTEUS 2010	21-22/09/10 Gothenburg, Sweden	Sweden, Denmark, Norway, EMSA	OW Aalborg
BALEX DELTA 2010	23-24/08/10 Klaipeda, Lithuania	Lithuania, Latvia, Estonia, Poland, Russia, Denmark, Germany, Sweden, Finland, EMSA	OW Copenhagen
LISBON 2010	14/10/10 Lisbon, Portugal	Portugal, EMSA	Ria de Vigo Bahia Tres
HILLA 2010	16/09/10 Helsinki, Finland	Finland, EMSA	Kontio
MALTEX 2010	19/10/10 Malta	Malta, EMSA	Salina Bay Santa Maria
9 Operational Exercises	14 Exercise Days *	20 EMSA counterparts	12 different EMSA SOSRVs

\* 2 vessels participated in 2 exercises.

#### EXERCISE VARNA 2010

This joint oil spill response exercise, held on 10 March 2010, was the first such exercise undertaken between Bulgaria and EMSA. It was a good opportunity to test the coordination and cooperation among EMSA's contracted vessels and the Bulgarian oil spill response units.

The exercise was designed to address oil pollution response activities in accordance with the National Oil Spill Contingency Plan and, in particular, the process for requesting and receiving international assistance in case of a major oil spill.

Two EMSA vessels participated in the Varna 2010 Exercise: *Santa Maria*, based in Malta (Contractor Falzon), and *GSP Orion*, based in Constanta (Contractor GSP).

An "open ship" activity was organised on board both EMSA contracted vessels for invited observers and media as well as the interested public. Experts and journalists showed interest in the vessels and oil spill response equipment.

There was considerable media interest in the "open ship" event. A large number of journalists and reporters, representing around 20 of the biggest national Bulgarian TV channels, radio networks and mass circulation newspapers, reported on the exercise activities.

#### EXERCISE SANTANDER 2010

The international exercise SANTANDER 2010 was organized by the Spanish Maritime Authority (Dirección General de la Marina Mercante) and took place from 25 to 27 May 2010. The purpose was to test the preparedness of the vessels for oil recovery operations, improve the crew training for the deployment of equipment, and identify problems in the mobilization process to reduce the response time.

Participants in the exercise were:

- Spain, with the vessels *Urania Mella*, *Salvamar Deneb*, *María Metzu* and *Mahón*;
- France with the vessel *Argonaute*;
- EMSA with the oil recovery vessel *Ria de Vigo*;

For the purposes of the exercise, the Spanish authorities launched the National Contingency Plan for Oil Pollution Response, the Cantabria Territorial Contingency Plan and the Biscay Plan.

In advance of the at-sea oil pollution response operations the participating vessels, including the *Ria de Vigo*, were in port at Santander and accessible to invited observers, journalists and interested members of the public. The *Ria de Vigo* visitors benefited from a guided tour of the vessel including a brief presentation of the oil spill response equipment and received informative leaflets on the vessel.

Operations at-sea began on 27 May 2010. The exercise scenario was fully executed and all of the exercise goals were achieved. The EMSA contracted vessel performed well. All instructions given by the On-Scene Coordination were followed by the vessel efficiently and in a timely manner. The *Ria de Vigo* fulfilled the role assigned to it by the Spanish Maritime Authority in charge of the exercise, and met the expectations of the Agency.

#### EXERCISE TRIENA 2010

The exercise TRIENA 2010 was conducted on 8 June 2010 in Greece. It was organised within the general framework of collaboration between the Hellenic Coastguard Authorities and EMSA, in order to check the adequacy of the existing pollution contingency arrangements on a regional basis (for example, mobilization, communications, decision-making capability, coordination, and surveillance of clean-up operations).

EMSA vessels participated in the TRIENA 2010 exercise: *Mistra Bay*, *Aktea OSRV* and its back-up vessel *Aegis*.

An "open ship" event was held on 9 June on board the *Aktea OSRV* for the public and for the participants of the POSIDONIA 2010 Exhibition being held at the same time. Detailed information on the EMSA Network of Stand-by Oil Spill Response Vessels and the *Aktea's* capacities was provided to the public and the media.



Guided tour for the visitors on board Aktea OSRV.

## JOINT ANTI-POLLUTION EXERCISE: THE NETHERLANDS - EMSA 2010

On 24 June 2010 a joint anti-pollution exercise organised between EMSA and Dutch authorities was held in the area "Vlakte van de Raan", 12 nautical miles North of Zeebrugge, Belgium. The exercise was hosted by the Dutch authorities – Rijkswaterstaat (RWS) – and included the participation of the EMSA contracted hopper-dredgers based in the North Sea: *DC Vlaanderen 3000* and *Interballast III*.

The exercise scenario simulated the collision between the tankers *Montego* and *Curzola* close to the border of Belgium and the Netherlands. As a result of the "accident", the *Montego* suffered significant damages in her hull. As the tanker *Montego* leaked 5,000 tonnes of heavy fuel oil into the sea, the Dutch National Contingency Plan was activated. In parallel, international assistance from EMSA's oil spill response vessels *DC Vlaanderen 3000* and *Interballast III*

(through signature of Incident Response Contract between the Netherlands and DC Industrial) was also triggered.

The main goal of the at-sea exercise was to deploy a series of oil booms from the *Interballast III* and form an Open-U configuration with the assistance of the *Frans Naerebout*. The next step was to follow the open boom configuration with the sweeping arms from the *DC Vlaanderen 3000*.

During the exercise, the *DC Vlaanderen 3000* and *Interballast III* fulfilled the role assigned by the Netherlands and also met the expectations of the Agency. The EMSA contracted vessels performed well and the crews were highly motivated.

The exercise scenario was realistic, and the manoeuvring of the hopper-dredgers with their sweeping arms behind the Open-U boom configuration was successfully conducted.



*Top: GDC Vlaanderen and Frans Naerbout manoeuvring to form an Open U configuration.  
Inerballast III with sweeping arms manoeuvring to the position behind the Open U for the simulated collection of oil.*

*Bottom left: DC Vlaanderen and Frans Naerbout towing booms in an open U configuration.*

*Bottom right: Inerballast III with sweeping arms in position for simulated oil collection.*

## EXERCISE MATTEUS 2010

On 21 and 22 September 2010 the international maritime pollution response exercise MATTEUS was held off Goteborg, Sweden. The exercise was organised by the Swedish Coast Guard within the framework of the Copenhagen Agreement (which includes Denmark, Finland, Iceland, Norway and Sweden). Its aim was to test the Copenhagen Agreement response system, its command and communication structure, the cooperation between the response units of the contracting parties, as well as their capability and efficiency. EMSA participated with the *OW Aalborg*, based in Skagen, Denmark. Units from the Danish Admiral Fleet, Swedish Coast Guard and Norwegian Kystverket also took part in the exercise.

The exercise scenario simulated the collision of the tanker *Matteus* and *Paulus* at the Goteborg anchorage area "A/R2". As a result of the "accident", the *Matteus* suffered significant damage to her hull. Emergency towage and emergency lightering performed involving the tanker in distress. Following the activation of the Swedish National Contingency Plan and request for assistance made to the MIC/EMSA and the Copenhagen Agreement, arrangements were made for appropriate oil recovery operations to be undertaken as well as shoreline clean-up.

The objectives for this exercise involving the participation of the *OW Aalborg* were:

- a) Testing the established mobilisation procedures between MIC/EMSA/Contractor and, the Swedish Coast Guard for requesting the assistance by EMSA contracted vessels;
- b) Acting as a vessel in distress and providing emergency lightering;
- c) Actual oil recovery exercise at sea, deploying response equipment.

*OW Aalborg* fulfilled the role assigned by the authorities in charge of this exercise and also met the expectations of the Agency. The EMSA contracted vessel performed well.

## EXERCISE BALEX DELTA 2010

BALEX DELTA operational response exercises have been held annually since 1989. This operational exercise is the largest maritime emergency and counter-pollution drill of its kind in the Baltic Sea area and one of the largest worldwide. The BALEX DELTA 2010 exercise took place off Klaipeda, Lithuania on 24 August 2010. The exercise included the participation of 8 oil spill response vessels from 8 different HELCOM contracting parties and a Lithuanian Air Force helicopter. EMSA participated in the exercise with the *OW Copenhagen* based in Copenhagen, Denmark. Other participating vessels were: *Arkona* (Germany), *KBV 201* (Sweden), *Kapitan Poinc* (Poland), *Guannar Seidenfaden* (Denmark), *Merikarhu* (Finland) *A-90 Varonis* (Latvia) and *Sakiai* (Lithuania).

The goals of the exercise were to train the HELCOM command and communication system and, for pollution response operations, to train the practical use of recovery equipment and cooperation between participating units. The exercise was based on the scenario where an oil tanker, after being loaded with about 100,000 tonnes of crude oil at the Butinge Oil Terminal, ran aground off the Lithuanian coast. As a result of the accident, the ship suffered a hull breach and leaked around 9,000 tonnes of oil, which drifted towards the Latvian coastline.

Once in the exercise area, the vessels were divided in 4 strike teams. Due to adverse weather conditions (winds over 27 knots), the use of oil spill recovery equipment was suspended by the organiser (Lithuanian Navy). The exercise continued with the participating units sailing in formation as requested by the On-Scene Coordinator from the Lithuanian Navy.

BALEX DELTA 2010 was a positive experience for the participants. The coordination between the different units was positively tested. The exercise showed the potential adverse conditions which may occur in a real situation.

It should be noted that the *OW Copenhagen* was the only vessel considering deployment of any equipment given the existing weather conditions.

## EXERCISE LISBON 2010

On 14 October 2010 an at-sea pollution response exercise, LISBON 2010, was held off Lisbon, Portugal. The exercise was organised and coordinated by the European Maritime Safety Agency in cooperation with Portuguese authorities. It was an operational type "DELTA" exercise for practical testing of the oil pollution recovery equipment in open sea conditions. The main aim of the exercise was to involve two EMSA contracted vessels in a joint operation. The participating vessels were the *Bahia Tres* based in Sines, Portugal and the *Ria de Vigo* based in Vigo, Spain.

The exercise was based on the following scenario:

On 12 October, 2010 at 09:00 UTC the tanker *Coral Water* reported collision with the cargo vessel *Egbert Wagenborg*. There was no damage to the cargo vessel. At 10:00 UTC due to hull damage of the tanker, a spill of 150 tonnes of heavy fuel (IFO 180) occurred. Accordingly, on 12 October, the Portuguese Authorities requested EMSA assistance via the MIC. Following this request, EMSA's Stand-by Oil Spill Response Vessel *Bahia Tres* and *Ria de Vigo* were contracted by the Portuguese Authorities and mobilised. On the morning of 13 October, the *Bahia Tres* and *Ria de Vigo* arrived on-scene. Due to adverse weather conditions, the oil recovery operation could only be started on the following day.

The LISBON 2010 exercise was a positive experience for all the participants. The coordination between both contracted vessels was tested positively. It should be highlighted that it was the first at-sea oil pollution exercise organised and coordinated by the Agency. The experience gained shows that similar at-sea exercises could be organised by the Agency in other parts of Europe. In such exercises, EMSA contracted vessels as well as units from other Member States could be involved.

The exercise plan was well prepared and both participating vessels were assigned clear roles in the exercise. The instructions of the On-Scene Coordinator (OSC) given were clear and correct. The Oil Pollution Response (OPR) equipment available and the vessels' formations were managed well. The "oil recovery operations" were performed well and both crews of the EMSA vessels showed high levels of motivation. *Ria de Vigo* and *Bahia Tres* fulfilled the roles assigned by the Agency for this exercise and met expectations.

## EXERCISE HILLA 2010

The exercise HILLA 2010 was organised by the Finnish Environmental Institute (SYKE) and took place off Helsinki, Finland on 16 September 2010. The goals of the exercise were to train the command and communication system with the Member State (Finland) and, for pollution response operations, to train the practical use of recovery equipment and cooperation between participating units.

The exercise included the participation of the *Kontio*, the *Seili* (OPR vessel from the Finnish Coastguard) and 2 OPR boats from the "Helsinki rescue and fire fighting brigade". HILLA 2010 was the first exercise with the participation of the *Kontio*, who was accepted for the Stand-By Phase of the EMSA Contract on 14 July 2010.

Due to adverse weather conditions the 2 smaller units could not proceed to the exercise area and continued the exercise within Helsinki harbour limits. *Kontio* and *Seili* deployed their primary OPR equipment, rigid and flexible sweeping arms respectively, but sea conditions made the use of the equipment unsafe and it was retrieved shortly after. In both cases the equipment was damaged.

After retrieval, *Kontio's* starboard side sweeping arm was found to have sustained minor damage to the brush skimmer pump. Damages to the equipment were repaired shortly after the exercise.

The overall outcome of the exercise was considered positive, despite the fact that weather conditions limited the application of the equipment.

## EXERCISE: MALTEX 2010

The MALTEX 2010 oil spill response exercise was hosted and organized by the Authority for Transport in Malta (ATM) as the national authority responsible for pollution response. The exercise was conducted on 19 October 2009 off the coast of Malta. The scenario included an oil spill resulting from a collision between a tanker and a cargo vessel off the Munxar East cardinal buoy.

Unfortunately, the weather conditions on the day of the exercise were adverse with strong winds and rough sea conditions. Due to the bad weather it was decided that there would be no deployment of equipment at-sea.

Instead, simulation of deployment of OPR equipment in the area was carried out and the vessels worked in formation. Consequently, the assigned role for EMSA's ships within the exercise was to simulate the mechanical oil recovery process.

FINANCIAL OVERVIEW: EXERCISES

	COMMITMENTS	PAYMENTS
Exercises 2009 (carry-over of payments)	0.00	33,906.14
Exercises 2010	536,649.47	499,649.47
Sub-total 3.1.2	536,649.47	533,555.61

3.1.3 Improvements to the Network Service

3.1.3.1 Trans-Rec Skimmers

In order to improve the performance of vessels' operational oil recovery capabilities and thus increase their contribution to response activities, the Agency implemented improvements to the technical capacity of the *Ria de Vigo* (Atlantic Coast) and *GSP Orion* (Black Sea).

Successful procurement was performed in 2009 for delivery of two Trans-Rec 150 multi-skimmers on board both vessels. After installing the Trans-Rec type skimmers, the oil recovery rate was increased to 300 m<sup>3</sup>/h (single skimmer), or even 400 m<sup>3</sup>/h if both skimmers (old and new) are used simultaneously.

The Trans-Rec type skimmers are independent units specifically designed for use on supply vessels with a large deck space available such as *Ria de Vigo* and *GSP Orion*.

Keeping in mind the fact that the areas in which the above mentioned vessels operate are considered as busy trading routes, and the associated high potential of oil pollution incidents, the installation of the proposed equipment considerably improved the vessels' operational capabilities.

The equipment on board both vessels entered into operational service in June 2010. Shortly after the acceptance of the skimmer of the *Ria de Vigo*, following the request for assistance by the US authorities, it was sent to the Gulf of Mexico in order to support the response actions to the *Deepwater Horizon* oil spill.



Trans-Rec 150 multi-skimmer on board *GSP Orion*.

### 3.1.4 Review of the operational effectiveness of the Network Service

In order to develop a better understanding of the potential operational effectiveness of the Network during an incident, an internal study was carried out with respect to different oil spill scenarios. The objective of the study was to analyse the benefits and limitations of the Network of Stand-by Oil Spill Response Vessels.

Both past incidents and hypothetical spills have been analysed. For past spills, six of the most significant incidents that occurred in EU waters were included. Additionally, scenarios have been developed based on the new pipelines that are expected to be operational in the next few years as well as for three hypothetical accidents that have not occurred to date e.g. a large spill in the Baltic Sea. Two specific incidents (*Erika* and *Prestige*) were analysed in more detail along with the overall results of all the scenarios.

The assumed performance of the EMSA Network was measured using three main indicators:

- Amount of pollutant (oil/water mixture) which would be recovered at sea;
- Net economic value (financial benefit to the requesting Member State);
- Reduction in length of coastline polluted.

The analysis clearly demonstrated that the EMSA Network would have a positive overall financial benefit to the affected Member State. Furthermore, it showed that the distribution of the vessels along the EU coastline currently has some gaps in the Northern Baltic, Bay of Biscay, Eastern Mediterranean and Black Sea. The new vessel *Kontio* that became operational this year has already closed the gap in the Northern Baltic. Furthermore, the new vessel *Alexandria* based in Cyprus, which will enter into the Stand-by Phase of the contract in 2011, will eliminate the gap in the Eastern Mediterranean.

### FINANCIAL OVERVIEW: EQUIPMENT IMPROVEMENT 2010

	COMMITMENTS	PAYMENTS
Improvements made in 2009 to the pre-existing arrangements (carry-over of payments)	0.00	770,337.36
Improvements made in 2010 to the pre-existing arrangements	7,017.00	0.00
Sub-total 3.1.3	7,017.00	770,337.36

## 3.2 CLEANSEANET SATELLITE SERVICE FOR OIL SPILL MONITORING

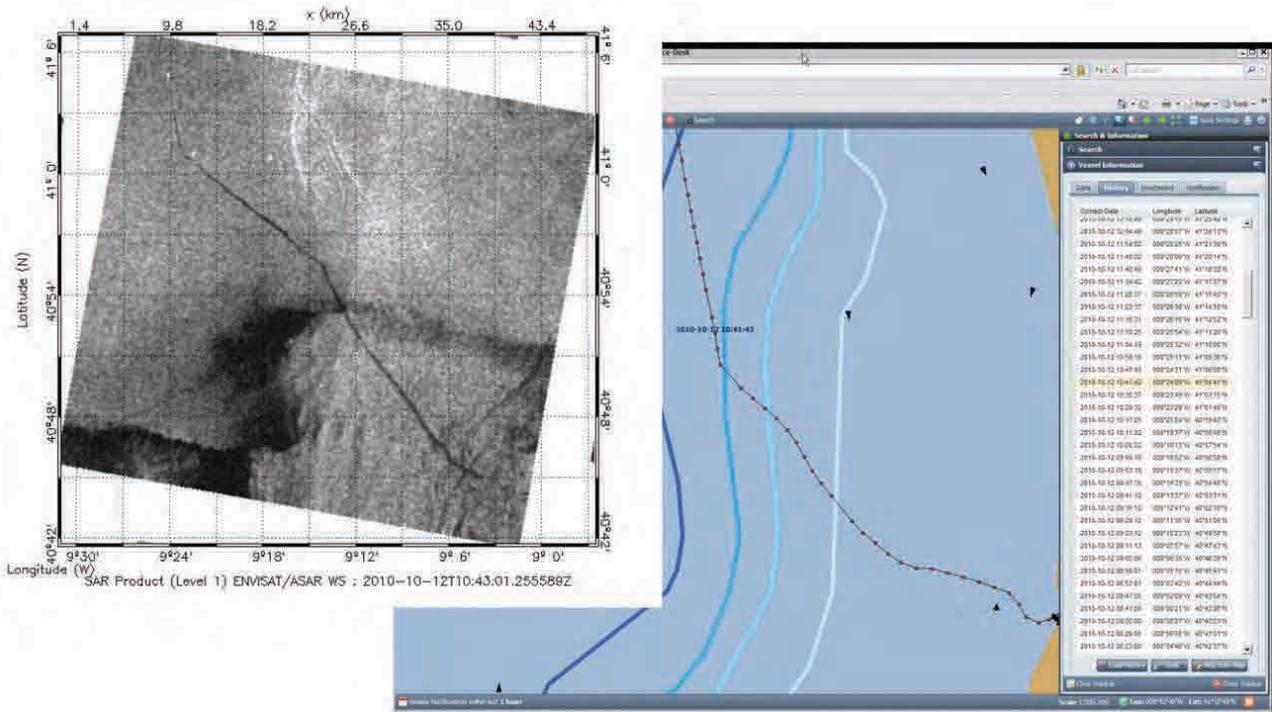
### 3.2.1 Introduction

2010 was an important year for the CleanSeaNet service with the entry into operations of CleanSeaNet 2<sup>nd</sup> generation.

CleanSeaNet, the European pollution monitoring and vessel detection service supports the illegal oil discharge response chain in coastal States. Its origin can be found in Directive 2005/35/EC (amended by Directive 2009/123/EC) 'on ship-source pollution and on the introduction of penalties, including criminal penalties, for pollution offences' proposed by the Commission in September 2005<sup>11</sup>. Article 10 tasked EMSA to "work with the Member States in developing technical solutions and providing technical assistance in relation to the implementation of this Directive, in actions such as tracing discharges by satellite monitoring and surveillance." In 2007, the Agency set up the CleanSeaNet service.

The initial service has evolved from basic pollution monitoring, and now includes vessel detection and elaborate functions to identify polluters. Satellite image analysis results are systematically combined with vessel tracking information. This information is made available for download through a user web portal, which provides a range of supplementary and supporting data. The key feature

<sup>11</sup> Directive 2009/123/EC of 21 October 2009 amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements (OJ L280, 27/10/09).



ENVISAT image acquired off the coast of Portugal during CleanSeaNet 2<sup>nd</sup> generation tests on 12 October 2010. An on-going spill is visible. The source of pollution can be clearly identified using SafeSeaNet data.

of CleanSeaNet is that the analysed images and related information products are available shortly after the satellite passes overhead. This feature is described as near real time (NRT) service provision<sup>12</sup>. In case an on-going pollution is detected, the alert is passed to the coastal State authorities immediately, without waiting for the completion of the full image analysis. The service can also provide support for Member States in response to accidental pollution as and when this is needed.

Marine oil pollution produced by ships falls into two broad categories. Firstly, oily residue can be produced by the operational activities of a vessel (for example, pumping out bilge waters<sup>13</sup>, tank cleaning operations). It should be noted that if an oil release is visible on a SAR satellite image, the quantity released is always above the legal limits for operational discharges. Secondly, damage to a vessel can result in oil being released into the marine environment. CleanSeaNet emergency services are available on the request of participating States in order to help monitor accidental pollution.

CleanSeaNet information is intended to be used in conjunction with national and regional initiatives of coastal States against polluters. The provision of images showing possible pollution and identifying likely polluters can only contribute to combat illegal discharges if follow-up actions are then taken by the affected State. For this reason, EMSA provides support to participating States in strengthening the pollution response chains they have in place at national level.

Reduction of pollution in European waters requires a regional approach. In addition to the 22 European Union coastal States, the service is currently also provided to Norway and Croatia, and on a pilot basis through the MONINFO project to countries of the Black Sea basin: Turkey and Georgia.

In 2011, following the signing of Conditions of Use, Iceland and Turkey will both receive the service on a permanent basis.

<sup>12</sup> For satellite images covering 400 km by 400 km, the analysis is provided in maximum 30 minutes. For images of different dimensions the time varies slightly.

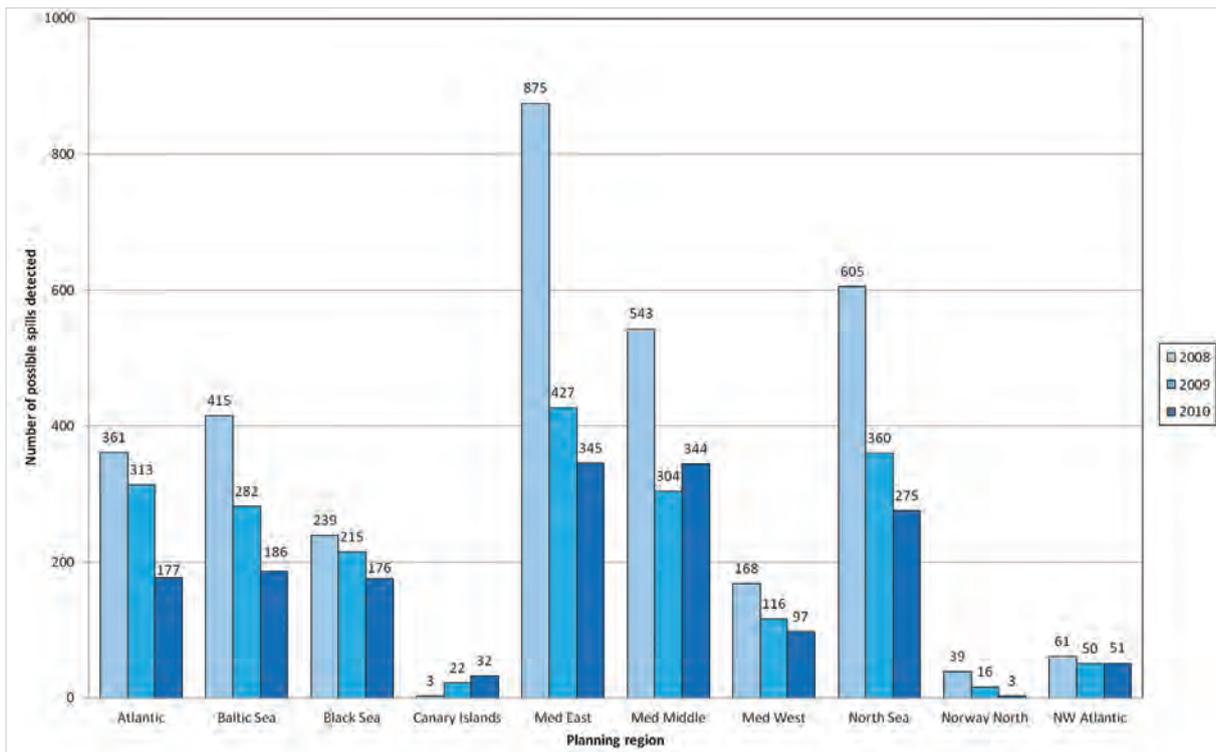
<sup>13</sup> Bilge waters are a mixture of sea water, oil, and all other products that accumulate in the bottoms of machinery spaces on-board a vessel.

3.2.2 The Operational Use of CleanSeaNet

SATELLITE	IMAGES	YEAR: 2010	
ENVISAT	Ordered	1571	
	Delivered	1399	89%
RADARSAT-1	Ordered	296	
	Delivered	242	82%
RADARSAT-2	Ordered	784	
	Delivered	725	92%
Total ordered images		2651	
Total delivered images		2366	89%

Of the 2366 images delivered, a total of 1686 possible oil spills were detected. In some areas, CleanSeaNet still detects many spills per image. In other areas, the number of spills per image has dropped. On average, the trend is a global reduction: from 1.38 possible spills per image in 2008 to 1.0 in 2009 and to 0.71 in 2010. Aerial surveillance undertaken by the participating States confirms this trend, which is a positive reflection of the impact of anti-pollution activities to which CleanSeaNet contributes.

The number of possible spills detected per region in 2008, 2009 and 2010 are shown in the chart below.



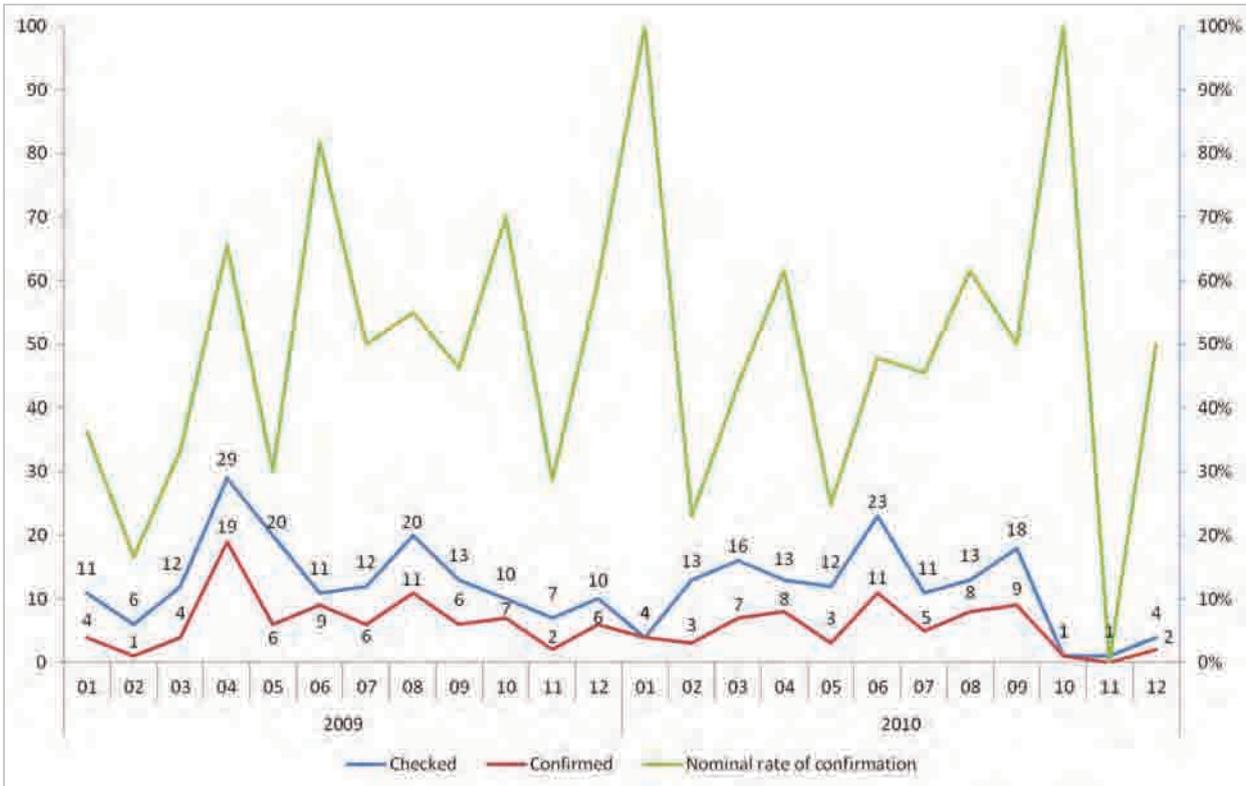
Following notification by the CleanSeaNet service of possible oil spills in waters in their jurisdiction, States are encouraged to take follow-up actions such as verification of whether the possible spill detected on the image analysis is oil or not.

Satellite images, like airborne radar systems, cannot distinguish between spills of mineral oil and of other substances which might be discharged, such as vegetable oil for example. Occasionally, weather conditions will make it impossible to distinguish between the texture of the sea surface flattening because of spilled oil, or because of weather. However, a number of improvements have been made to the image analysis undertaken, and as the CleanSeaNet service develops and matures the “mis-reporting” of possible spills occurs less often. The good performance of CleanSeaNet is reflected in the high confirmation rate, close to 50%, when verification is performed in an adequate manner as explained below.

Timeliness is a critical factor for being able to successfully confirm the presence of a spill. Therefore, aircraft are the most suitable tool to check CleanSeaNet detections, as they can reach the site of the spill quickly. Furthermore, it is far easier to locate and characterise a spill from the air than from the bridge of a vessel.

The “nominal rate of confirmation” – i.e. the rate of confirmation when possible spills detected by CleanSeaNet are checked by aircraft less than 3 hours after satellite overpass – is more than double in comparison to the average rate of confirmation. In 2010, the nominal rate of confirmation reached 23% while the average rate was 47%.

The chart below presents monthly values of the nominal rate of confirmation from January 2009 to December 2010.



There are two reasons why CleanSeaNet detections might not be confirmed:

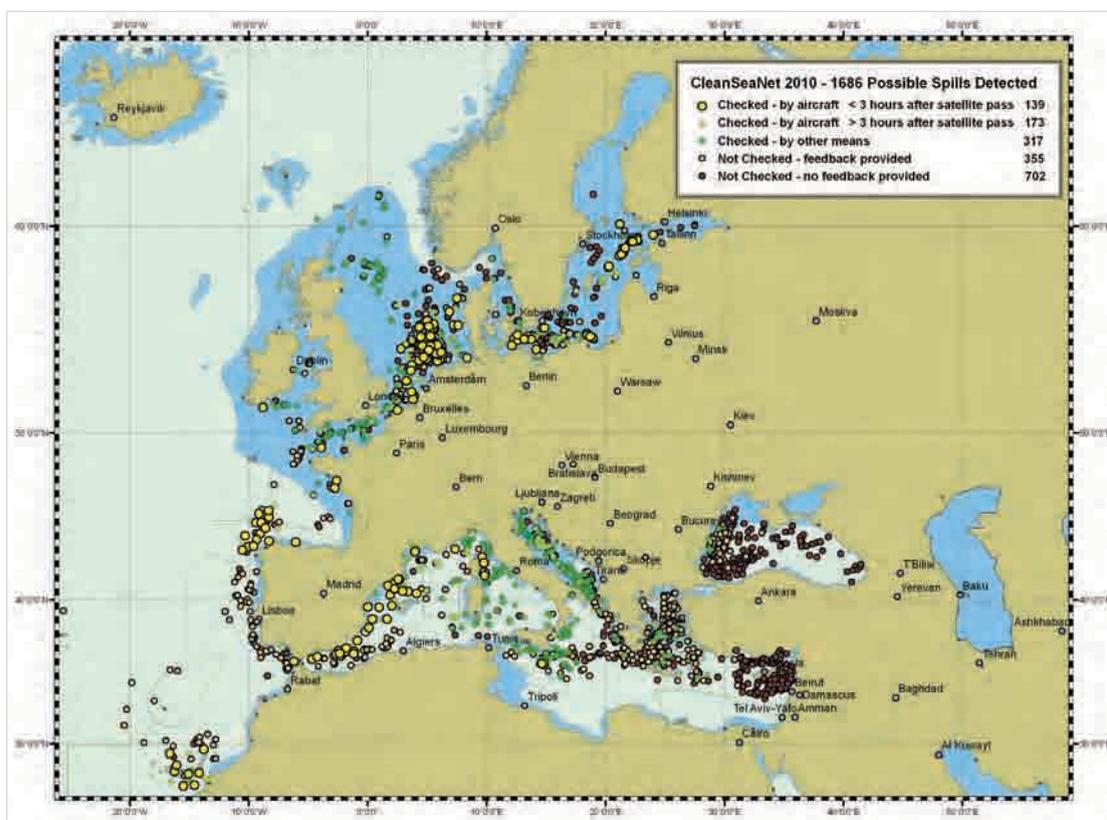
1. The possible spill reported is checked too late and/or with inadequate means;
2. The possible spill reported is a look-alike, i.e. another substance or a natural phenomenon producing the same effect on the sea surface as oil, or the possible spill reported was a false alarm.

Analysis of feedback provided by the Member States shows that 18% of the possible spills are further analysed by aircraft surveillance, but only 8% in a timely manner.

The map of the verification activities conducted also reveals significant disparities between the different areas throughout Europe (see next page).

Many coastal States still do not have adequate systems in place for properly verifying possible spills. In many cases, oily products resulting from an illegal discharge will “weather out”<sup>14</sup> a few hours after the release.

<sup>14</sup> When oil is spilled in the marine environment a number of physical and chemical effects can be noted. Commonly known as “weathering” of the oil, one of the key issues to consider is that the more volatile compounds will evaporate during the initial phase of the incident.



CleanSeaNet verifications – Year 2010.

CleanSeaNet is intended as a tool to be integrated in national response chains. As such, and as illustrated above, its efficacy is very much dependent on the use Member States make of it, and on the way in which Member States verify the possible detections observed.

Inspections in port of vessels suspected of pollution after a CleanSeaNet detection can improve the overall efficiency of the illegal discharge response chain. Some countries are systematically requesting an inspection in the next port of call when a detection is reported. From the results communicated to EMSA it seems that up to 20% of vessels inspected on this basis have deficiencies, and up to 10% can be detained. There are not enough data to draw any definitive conclusions, but this indicates that detention in port could be a very efficient follow-up to CleanSeaNet detections, and could also increase the deterrent effect of the service.

The level of feedback given by States on administrative or judicial follow-up subsequent to the confirmation of an oil spill reported by CleanSeaNet is very limited. For this reason, it is difficult to ascertain how many CleanSeaNet detections result in fines or legal proceedings of any kind.

During 2010 preparations were made for a workshop, to be held in February 2011, to bring together authorities in pollution response, inspection of ports and law enforcement communities in order to identify how the Agency can further support the enhancement of the illegal discharge response chain.

#### Support to Aerial Surveillance Operations of Member States and Regional Agreements

Coordinated Extended Pollution Control Operations (CEPCO) are international joint operations organised to monitor ship-source marine pollution in high density traffic areas. During a CEPCO operation, participating countries carry out intensive aerial surveillance over selected sea areas during a defined time period. Patrols are undertaken by aircraft equipped with specialised equipment, such as side looking radars (SLAR), ultraviolet and infrared sensors. CleanSeaNet service supports these operations with the provision of supplementary satellite images.

During 2010, three CEPCO operations of varying size were organised:

a) Northern Baltic Sea mini-CEPCO

On the 5 July 2010 a mini-CEPCO operation was carried out by Finland, Sweden and Estonia in the Northern Baltic Sea. Two satellite scenes were provided by CleanSeaNet over the area. No possible oil spills were detected, but Swedish aircraft crew found one garbage slick in the area.

b) HELCOM Agreement CEPCO North

All Contracting Parties to HELCOM were invited to take part in an operation organised by Estonia from 28-30 September. Finland, Sweden and Denmark provided aircraft for surveillance purposes. The area covered by the operation included high traffic density areas in the Finnish Gulf and the Baltic Sea. EMSA supported the operation with two satellite images.

c) Bonn Agreement Super-CEPCO

A Super-CEPCO operation took place in the English Channel from 12-17 October, 2010. The operation was organised by the French authorities. 8 countries participated: Belgium, Denmark, Germany, the Netherlands, Sweden, Spain, UK and France. EMSA provided 8 satellite images during the 5 day period of the operation. Only one possible spill was reported by CleanSeaNet but it was checked too late to be confirmed. One spill was observed by aerial surveillance but the polluter was not identified. These results confirm the trend of decreasing pollution in some areas.

FINANCIAL OVERVIEW: SATELLITE IMAGE LICENSES AND PROCESSING

	COMMITMENTS	PAYMENTS
Satellite image licenses	910,000.00	690,620.00
Satellite image processing (V1)	1,783,000.00	1,322,237.01
Satellite image processing (V2)	2,060,000.00	0.00
Sub-total 3.2.2	4,753,000.00	2,012,857.01

3.2.3 Support to CleanSeaNet Users

The CleanSeaNet User Group

A strong link with the CleanSeaNet user community in the Member States is necessary in order to provide a service oriented towards user needs. Representatives from the participating States operationally involved in oil pollution monitoring and surveillance are therefore invited to meetings of the CleanSeaNet User Group, which are held biannually. In 2010, the CleanSeaNet User Group met twice: on 7-8 June, and on 18 November.

The CleanSeaNet User Groups in 2010 focussed predominantly on the definition and implementation of CleanSeaNet 2<sup>nd</sup> generation.

Coastal States Training

In February 2010, 22 participants from the States using CleanSeaNet attended the final training session on CleanSeaNet 1<sup>st</sup> generation. In November, two special training sessions were provided to prepare users for using CleanSeaNet 2<sup>nd</sup> generation, to which all participating States were invited. Each training session lasted two days, and they were attended by 37 and 34 participants respectively. Users were introduced to the new functions and features, and took part in practical exercises using the CleanSeaNet Data Centre. They had an opportunity to present observations and discuss any concerns.

FINANCIAL OVERVIEW: CSN USER MEETINGS, TRAINING AND WORKSHOPS

	COMMITMENTS	PAYMENTS
Satellite image licenses	910,000.00	690,620.00
Satellite image processing (V1)	1,783,000.00	1,322,237.01
Satellite image processing (V2)	2,060,000.00	0.00
Sub-total 3.2.3	4,753,000.00	2,012,857.01



CleanSeaNet 2<sup>nd</sup> generation training session.

### 3.2.4 Service Implementation, Improvements, and Developments

CleanSeaNet 1<sup>st</sup> generation contracts were awarded in 2007 for a period of 3 years. They were extended once, for a one year period, terminating in December 2010. The tender procedure for the next generation of the service started in 2009. The contract for the implementation of the CleanSeaNet Data Centre was awarded in November 2009. The contracts for the service itself, including the acquisition and the analysis in near real time of satellite images for oil spill and vessel detection, were signed in June 2010.

Consequently, 2010 was dedicated to the preparation for the second generation of CleanSeaNet. There are a number of major improvements, including:

- the provision of vessel detection service as an intrinsic product of the service;
- the configurable alert mechanism to support participating States individual response criteria;
- the provision of additional information to support response operations.

The CleanSeaNet Data Centre is the core element of CleanSeaNet 2<sup>nd</sup> generation. It makes available to the end users in the participating States oil spill and vessel detection information delivered by the service providers. The CleanSeaNet Data Centre collects and stores the data necessary to support the oil spill and vessel detection analysis process. The CleanSeaNet Data Centre issues alerts to the authorities of each country affected by a possible pollution.

European waters were divided into different areas, called tasking areas. The company for each tasking area is responsible for all acquisitions for that area. However, in case of temporary failure or poor performance by the assigned service provider, the “cascading” contract allows images to be acquired and analysed by another service provider. CleanSeaNet service contracts were awarded to four European companies: CLS, Edisoft, e-GEOS and KSAT.

The integration of the different components of the new service was challenging as the CleanSeaNet Data Centre interacts not only with the end users in the participating States but also with service providers, satellite operators, oil drift model operators, and ancillary data providers. It also

links with other information systems such as SafeSeaNet. In CleanSeaNet 2<sup>nd</sup> generation EMSA will undertake, together with the Member States, the planning process in its entirety.

CleanSeaNet 2<sup>nd</sup> generation will use GÉANT, the European high speed data communications network to ensure fast data delivery by the Service providers to the CleanSeaNet Data Centre. This was implemented with the support of the European Commission’s Directorate General for Enterprise and DANTE<sup>15</sup>. A Memorandum of Understanding was signed between EMSA and the FCCN (Fundação para a Computação Científica Nacional), the operator of the Portuguese National Research and Education Network (NREN).

The CleanSeaNet Data Centre was made available to all participating States on 13 December 2010. The second generation of CleanSeaNet will be phased in progressively to become fully operational by February 2011.

The new features of CleanSeaNet 2<sup>nd</sup> generation include, amongst others:

- The possibility to acquire image segments up to 1400 km long instead of the smaller square images;
- A direct link with SafeSeaNet vessel information data;
- Improved image display quality;
- Access to electronic nautical charts throughout European waters;
- Systematic display of oil drift models results (forecasting and backtracking) for spills detected in the areas of validity of the models;
- The possibility to include optical satellite images;
- Oceanographic and meteorological information.

### 3.2.5 Cooperation with External Organisations

In 2010 the CleanSeaNet service developed or increased links with a variety of external organisations.

CleanSeaNet is a recognised service of the Global Monitoring for Environment and Security (GMES) programme, with core and downstream components. The close relationship between EMSA, the European Commission and the

15 DANTE (Delivery of Advanced Network Technology to Europe) plans, builds and operates advanced networks for research and education. It is owned by European NRENs (national research and education networks), and works in partnership with them and in cooperation with the European Commission. DANTE provides the data communications infrastructure essential to the development of the global research community.

European Space Agency (ESA) through involvement in the GMES programme, ensures the connection of CleanSeaNet with other marine GMES services. This enables EMSA to make use of available operational GMES data to complement the CleanSeaNet data sets provided to Member States on a routine basis and on request. The GMES framework also provides the Agency with access to further radar and optical satellite imagery during emergency situations.

The cooperation with the European Space Agency (ESA) has again been strengthened by the signing of the second Cooperation Agreement between both Agencies in June 2010, demonstrating the close partnership between the two organisations. Based on this cooperation, EMSA receives access to the GMES contributing (satellite) missions contracted by ESA for emergency.

The cooperation with the Institute for Protection and Security of the Citizen (IPSC) of the Joint Research Centre (JRC) has been extended for one year with the signing on 1 July 2010 of a new Service Level Agreement (SLA). This agreement is a follow-up to the previous SLA, which came to end in April 2010. The main scope concerns the operational integration of tools for automatic oil spill detection into the newly implemented CleanSeaNet Data Centre.

Activities aimed at delivering support tools for maritime surveillance purposes are also foreseen under the agreement with the JRC. This includes vessel detection software, using Synthetic Aperture Radar (SAR) images as input, with the most up-to-date algorithms, as well as correlation of results with vessel traffic information.

The Agency is providing, on project-by-project basis, CleanSeaNet services to some third countries. Within this framework, EMSA participated in the “Environmental Monitoring of the Black Sea basin: Monitoring and Information Systems for Reducing Oil Pollution (MONINFO)” project. The Permanent Secretariat to the Commission on the Protection of Black Sea against Pollution has been operating MONINFO with the aim of developing a monitoring and information system for reducing oil pollution in the Black Sea. The project is financed by the European Commission through a DG Environment grant and EMSA was requested to assist with the implementation of the project and Georgia and Turkey have been granted limited access to CleanSeaNet.

FINANCIAL OVERVIEW: CSN OPERATION

	COMMITMENTS	PAYMENTS
CSN V1 - maintenance and running costs	36,066.60	420,332.00
CSN V2 - maintenance and running costs	2,000.00	0.00
CSN V1 improvements	4,999.00	52,895.52
CSN DC improvements	28,383.20	28,383.20
Oil Spill Services set-up	1,330.96	1,330.96
External programs, projects	414,900.00	106,666.67
CSN 2 <sup>nd</sup> Generation: "CleanSeaNet Data Centre" set-up	0.00	630,000.00
CSN 2 <sup>nd</sup> Generation: "CleanSeaNet services" set-up	442,731.00	368,543.35
Sub-total 3.2.4 and 3.2.5	930,410.76	1,608,151.70

3.3 SUPPORT TO COASTAL STATES AND THE COMMISSION FOR ACCIDENTAL SPILLS

3.3.1 Introduction

In accordance with the EMSA Regulation as amended, the Agency can provide, following requests from a Member State or the Commission, operational spill response assistance for oil pollution accidents in terms of:

- At-sea oil recovery services mobilising the network of EMSA contracted pollution response vessels;
- Satellite imagery using the CleanSeaNet service; and
- Pollution response expertise available through Agency staff.

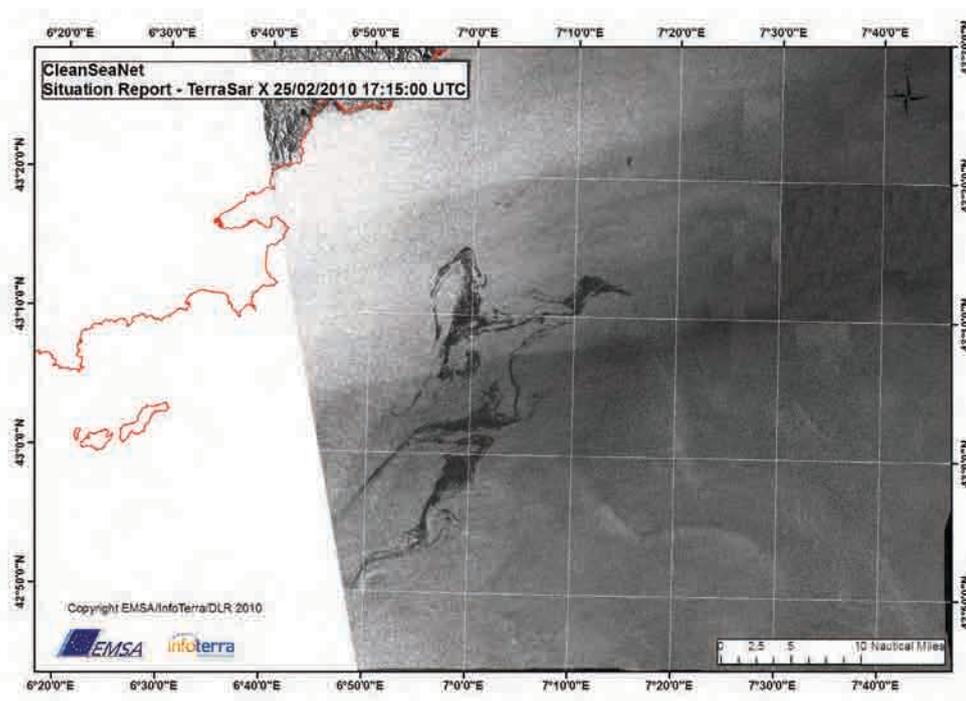
Such assistance can be requested through the Monitoring and Information Centre (MIC) of the European Commission or when just using CleanSeaNet to cover smaller accidents, directly from the Agency. Additionally, in the event of a major spill in European waters and/or adjacent high seas, EMSA will normally be appointed as a Project Manager under the International Charter for Space and Major Disasters with responsibility for the coordination of emergency delivery of satellite images to affected coastal State(s). Normally in such cases the Charter will be activated by the MIC. This cooperation ensures fast delivery of satellite images. CleanSeaNet can also supplement coverage with additional images. Costs for these emergency activities, aside from staff missions, are covered by existing running contracts. Short descriptions of incidents involving significant assistance from the Agency are provided below.

In 2010 the Agency provided operational support to the United States of America following the well blow-out of the offshore platform *Deepwater Horizon*. This support was organized with and on behalf of the European Commission's Monitoring and Information Centre (MIC).

### 3.3.2 Collision between the *Strauss* and the *Francia*, Italy

On the morning of 19<sup>th</sup> February 2010, a collision occurred between the fully cellular container ship *CMA CGM Strauss* (65247 gt, built 2004, IMO 9280641, BV classified, Bahamian flagged, French owned and managed) and the tug *Francia* (347 gt, built 1997, IMO 9163740, RINA classified, Italian flagged, owned and managed) around 1.5 km off the Voltri terminal entrance at the port of Genoa, north-western Italy.

This resulted in the holing of a fuel tank of the container ship and the spillage of an estimated 184 tonnes of fuel oil. Following a request from the French authorities, CleanSeaNet provided 6 satellite images through the CleanSeaNet service chain (Radarsat-1, Radarsat-2 and Envisat), in order to monitor the movement of the oil slick between Genoa and Toulon. Images from other satellite missions (TerraSAR-X, COSMO-SkyMed, RapidEye and SPOT) were provided through the activation an emergency acquisition procedure with the European Space Agency (ESA). The image showing the full extent of the spill was acquired within 30 hours of the emergency activation. Five situation reports were also sent to the French authorities between 19 February and 2 March, when the emergency support ended.



### 3.3.3 Deepwater Horizon incident

On 22 April, after an explosion and fire, the *Deepwater Horizon* drilling platform capsized and sank approximately 50 miles southeast of Venice, Louisiana. Hundreds of thousands of tonnes of crude oil spilled continuously into the Gulf of Mexico for months, leading to the biggest oil spill in the history of the United States and one of the largest in the world ever.

EMSA closely monitored evolution of the situation and analysed the possibilities to support the oil spill response activities in the Gulf of Mexico.

The Agency prepared Daily Reports about the incidents, which were sent to EU member states via the MIC. Those reports, containing data, statistics, photographs and maps, aimed at providing timely updates to the Member States



Framo Trans-Rec 150 skimmer being loaded on board of an aircraft for transport from Vigo, Spain to New Orleans, USA.

about the essential facts of the spill and related response activities. Some reports included the analysis of satellite images.

Following the request for response equipment by the US authorities to the EU Member States, EMSA prepared different assistance options, including a number of EMSA contracted SOSRV's and various types of autonomous specialised response equipment. They were offered as a part of the coordinated European Union's assistance offer to the US.

Eventually, at the end of June the Federal On-Site Coordinator in the US requested the EMSA oil pollution equipment to help combat the *Deepwater Horizon* spill. The equipment provided was a high-capacity Framo Trans-Rec 150 skimmer system, stockpiled in Vigo (Spain), the home port of the EMSA contracted oil spill response vessel *Ria de Vigo*.

Furthermore, an EMSA official visited the US, under the International Observer Programme (IOP) of the Department of State, in order to exchange information about the incident and consider operational assistance scenarios with the responsible US authorities.

### 3.4 FINANCIAL OVERVIEW: OPERATIONAL ASSISTANCE

	COMMITMENTS	PAYMENTS
Network of Stand-by Oil Spill Response Vessels	13,504,497.94	8,928,862.73
Maintaining the Service: Exercises	536,649.47	533,555.61
Improvements to the existing arrangements	7,017.00	770,337.36
CleanSeaNet (CSN)	5,683,410.76	3,621,008.71
CSN meetings/workshops/trainings	185,278.43	91,693.52
Sub-total for Operational Assistance	19,916,853.60	13,945,457.93

## 4. COOPERATION AND COORDINATION

### 4.1 INTRODUCTION

The work of the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR) continued as detailed below. EMSA also continued its cooperation with the pollution response experts of Member States, with the Regional Agreements (Bonn Agreement, HELCOM, REMPEC, Black Sea Commission and Lisbon Agreement) and the International Maritime Organisation.

### 4.2 CONSULTATIVE TECHNICAL GROUP FOR MARINE POLLUTION PREPAREDNESS AND RESPONSE

The Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR) was established by EMSA in 2007 and is composed of marine pollution response experts from all 27 Member States, EU Candidate Countries (Turkey and Croatia), EFTA Coastal States (Iceland and Norway), the Regional Agreements' Secretariats and the European Commission represented by DG ECHO (until 2010 this representation was through DG Environment, now DG ECHO).

The main objective of the CTG MPPR is to provide at EU level a platform for Member States to contribute to

the improvement of preparedness for and response to accidental and deliberate pollution from ships. The forum enables participants to exchange information, views and opinions, share best practice and define the current and future priority actions, which may include workshops, reports, studies and training to be addressed by the CTG MPPR for 2010-2011 and beyond.

At its 5<sup>th</sup> meeting in October 2010, the status of on-going priority actions and planned activities agreed for 2009-2010 was reviewed and new projects were included in the CTG MPPR Rolling Work Programme for 2010-2011 after a comprehensive assessment. A summary of the status of CTG MPPR on-going and planned activities for 2010-2011 is provided below.

#### 2<sup>nd</sup> Joint DG ECHO-EMSA workshop: "Co-ordinated at-sea and shoreline pollution response"

Considering the mandates of EMSA (at sea response) and DG ECHO (shoreline response) and following interest expressed at the CTG MPPR, one of the on-going items under the CTG Rolling Work Programme is the coordination of at-sea and shoreline pollution response. The first Joint EMSA-DG ECHO workshop, entitled "Co-ordinated at-sea and shoreline pollution response" was held in Lisbon on 30 June 2009 with participants from the different national authorities involved in pollution response (marine pollution



Participants of the 5<sup>th</sup> meeting of the Consultative Technical Group for Marine Pollution Preparedness and Response.

experts and civil protection experts) from the EU/EFTA Member States. The workshop format, bringing together civil protection and marine pollution actors, was widely appreciated by participants as a valuable opportunity to learn from each other. There was a strong consensus among the participants to repeat this joint workshop on a regular basis. Accordingly, the second joint workshop was held in Brussels on 9 December 2010, with the aim to further discuss relevant issues identified at the first workshop. In particular, operational links between shoreline and at-sea response authorities were presented by looking into the role of industry and port authorities within national response systems and their coordination arrangements with governmental authorities. Furthermore, oiled waste management was addressed, as were new services, products and developments in the field of response to pollution challenges. In concluding the workshop, there was consensus in holding a 3<sup>rd</sup> joint workshop in 2012, on the topics of health and safety during response operations.

### Workshop on the implementation of the OPRC-HNS Protocol in the EU

The Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS Protocol 2000) provides the framework for the development of national and regional capacity to prepare for and respond to HNS pollution incidents, and aims to facilitate international cooperation and the provision of mutual assistance in this field. It is worth noting that to date, from the 25 countries that have ratified the Protocol internationally, 12 are EU Member States and 6 additional EU countries are considering and/or preparing for its ratification or accession hereto.

A workshop was held in Lisbon in June 2010, which discussed the specific requirements of the OPRC-HNS Protocol. The workshop included presentations of the international legal framework covering HNS marine pollution, detailed presentations of the Protocol's operational requirements, as well as information on best practices, existing supporting means, tools and resources regarding the Protocol's implementation. It also identified the main gaps and challenges faced in the Member States.

### EMPOLLEX: EMSA Marine Pollution Expert Exchange Programme

The EMSA Marine Pollution Expert Exchange Programme (EMPOLLEX) was launched in 2008 under the CTG MPPR umbrella. The main objectives of EMPOLLEX are to promote exchange of best practice between the Member States and to enhance contacts, networking and cooperation between Member States in the field of marine pollution with a view to improve national preparedness and capabilities for response. Within the EMPOLLEX framework, national experts from participating States are given the opportunity to travel to other EMPOLLEX countries, in order to gain or share professional experience.

Five exchanges of experts under the EMPOLLEX umbrella were successfully completed in 2010. Furthermore, the EMPOLLEX Guidelines and Annexes were revised in 2010, in order to reflect updates to the Programme following its first 2 years of operation, as well as to strengthen the programme and achieve smoother coordination and operation.

### Claims management and cost recovery: EU States Claims Management Guidelines

Following the input from participants of the claims management workshop in December 2009, EMSA and the Claims Management Working Group finalised **The EU Member States Guidelines on Claims Management** in early 2010. The Guidelines were approved in October 2010 and are now available at EMSA's general website.

These Guidelines are the first document at EU level comprehensively describing the preparation of claims for cost recovery following maritime incidents from an operational point of view. They comprise 12 chapters constituting an excellent reference tool where response authorities can find essential legal background information, including useful principles facilitating the work of the claim handlers prior, during, and following the incident.

### 4.3 ACTIVITIES IN THE FIELD OF OIL SPILL DISPERSANT USE

In accordance with the **EMSA Action Plan for Oil Pollution Preparedness and Response**, the Agency is addressing the issue of the use of oil spill dispersants and their implications. Once oil is spilled into the sea, the primary goal of any response action is to mitigate the socio-economic and environmental impact by removing the spilled oil from the water surface as fast as possible. The purpose of oil spill dispersants is to transfer the oil from the sea surface, in the form of very small droplets, into the water column where there is a significant dilution effect. With regard to using oil spill dispersants EMSA focuses on supporting Member States with relevant information and tools to allow for science based decisions as appropriate in the respective country or region. In 2007, the Agency distributed to the EU Member States and EFTA countries the **Operational Manual on the Applicability of Oil Spill Dispersants**. This software “tool” was well received and after a period of utilization, feedback was received from users in the Member States and from the Commission. This feedback was considered in a public procurement procedure to update and improve the “tool”. The new software: **EMSA Dispersant Usage Evaluation Tool (DUET)** was completed and distributed to Member States and EFTA coastal states Maritime Administrations in early 2010.

### 4.4 REGIONAL AGREEMENTS AND IMO

Within the framework of its HNS Action Plan, EMSA continued its cooperation with the International Maritime Organisation (IMO) on issues of common interest. The Agency regularly participates and contributes, as part of the European Commission delegation, to the OPRC/HNS Technical Group meetings, which are the main technical IMO forum on marine pollution preparedness and response. These meetings are held every 9 months at the IMO headquarters in London.

In 2010, two meetings of the OPRC/HNS Technical Group were held at the IMO headquarters in London. EMSA, on behalf of and as representative of the Commission was able to attend both meetings. During the meeting in March, EMSA presented its inventory of over 250 EU, regionally and nationally funded research projects in the field of pollution preparedness and response. The Group noted it is

a good source of information and acknowledged that it may help avoiding duplication of efforts.

The IMO OPRC/HNS Technical Group recently identified the update of the IMO guidance document on dispersants as a priority for its work. In this context, EMSA presented at the meeting in September its 2009 **Manual on the Applicability of Oil Spill Dispersants** for consideration as a base for the revised IMO guidance document. The IMO OPRC/HNS Technical Group recently identified the update of the IMO guidance document as a priority for its work. In this context, EMSA presented its Manual on the Applicability of Oil Spill Dispersants for consideration as a base for the revised IMO guidance document.

With respect to the Regional Agreements e.g. Helsinki Convention, Bonn Agreement and Barcelona Convention, the Agency also provides technical support to the European Commission, as part of the Community delegation, during relevant meetings. For example, in addition to participating in the HELCOM Response Group, EMSA is also a member of HELCOM IWGAS (Informal Working Group on Aerial Surveillance) which meets once a year. EMSA contributes to these meetings by submitting papers, participating in discussions and also being involved in the various operational exercises organised around Europe. In advance of the accession of the European Union to the Bucharest Convention, the Agency also participates in relevant Black Sea Commission meetings.

The initiative of holding informal meetings with the Secretariats of the various Regional Agreements and the European Commission is continuing. The 2010 INTERSEC meeting was hosted by the Black Sea Commission in Istanbul, Turkey, in February 2010.

### 4.5 FINANCIAL OVERVIEW: COOPERATION AND COORDINATION

	COMMITMENTS	PAYMENTS
2010 CTG Meeting and CTG workshops	74,894.69	51,146.49
EMPOLLEX	18,000.00	7,999.13
Activities in the field of dispersants	800.00	2,752.08
IMO / Regional Agreements	0.00	0.00
Sub-total for Cooperation & Coordination	93,694.69	61,897.70

## 5. INFORMATION

### 5.1 INTRODUCTION

The Agency continued collecting and disseminating information in the field of marine pollution preparedness and response. In 2010, the **Multi Annual Funding Mid-term Report** was prepared, the MAR-ICE Network continued its operation of providing upon request information on chemical spills at sea. A number of publications relevant to pollutions preparedness and response were disseminated to a broad audience.

### 5.2 MULTI ANNUAL FUNDING MID-TERM REPORT

In accordance with Regulation 2038/2006/EC on the Multi-annual Funding of the Agency's pollution preparedness and response activities, a Mid-term Report for the period 2007-2009 will be submitted to the European Parliament and the Council by the Commission on the basis of information provided by the Agency. EMSA prepared its (comprehensive) contribution, which was submitted as requested to the Commission in October 2010.

The European Maritime Safety Agency has undertaken a wide range of activities in the field of marine pollution preparedness and response during the period 2007-2009 and these activities are presented in detail under the three main themes of operations, cooperation and coordination, and information.

As part of the review, an analysis has been undertaken on the cost-efficiency of the approaches implemented by EMSA to provide the two main operational services (CleanSeaNet and the Network of Stand-by Oil Spill Response Vessels) at the European level. Furthermore, oil transport patterns around Europe - an important consideration for the distribution of EMSA's SOSRVs - has been updated based on data available to 2009.

In early 2010, EMSA consulted its stakeholders, primarily Member States and their marine pollution experts, as well as relevant industries to obtain feed-back on the activities undertaken by the Agency. The feedback received was summarised and included in the MAF Mid-term Report to the Commission, which is available to download on the EMSA website.

### 5.3 ACTIVITIES WITH REGARD TO HAZARDOUS AND NOXIOUS SUBSTANCES (HNS)

#### 5.3.1 MAR-ICE Network: Information Service for Chemical Emergencies

When dealing with an HNS pollution incident, one of the priority requirements is the identification of the hazard and an assessment of the risk posed by a stricken vessel and its cargo to the public and responder safety, the environment and socioeconomic assets that a state or coastal community depend upon. The primary factors which determine the safety, environmental and socioeconomic impact of the released HNS material(s) relate to the chemical and physical properties of the material and its physical fate in the environment.

The establishment of a network of experts, who can support and advise the Member States during the response to a chemical spill, was outlined in EMSA's HNS Action Plan as a priority activity for the Agency. EMSA undertook a careful analysis to determine the best approach to implement this task. Based on this analysis and in close cooperation with the European Chemical Industry Council (CEFIC) and the Centre of Documentation, Research, and Experimentation on Accidental Water Pollution (Cedre), the MARine Intervention in Chemical Emergencies (MAR-ICE) service was developed by the Agency in 2008. The MAR-ICE service is based on CEFIC's voluntary ICE (Intervention in Chemical transport Emergencies) network, which provides similar assistance for land-based chemical spills through experts from chemical companies who are familiar with the chemical substances involved in the incident.

The MAR-ICE Network became operational in January 2009. The MAR-ICE service can advise and support Member States upon request with timely information on scientific, technical, and operational aspects of an HNS spill, by providing remote product specific information on chemical substances, as well as information on the fate of a substance in the marine environment, where available. The MAR-ICE service aims to strengthen the rapid information transfer regarding chemical substances involved in marine pollution emergencies, and address a common gap in this field identified across the EU. The 24/7 service is provided free of charge to the EU Member States and coastal EFTA States.



The BG Dublin lost a container with HNS in heavy seas.  
(The diagram shows a screen shot of the CHEMMAP simulation provided through MAR-ICE).

The service has been used successfully for spill exercises and real incidents. In 2010, the service was activated twice during real incidents, once by Ireland in January and once by Sweden in August. EMSA monitors and evaluates the service's operation annually. These reviews form the basis for modifications of the service.

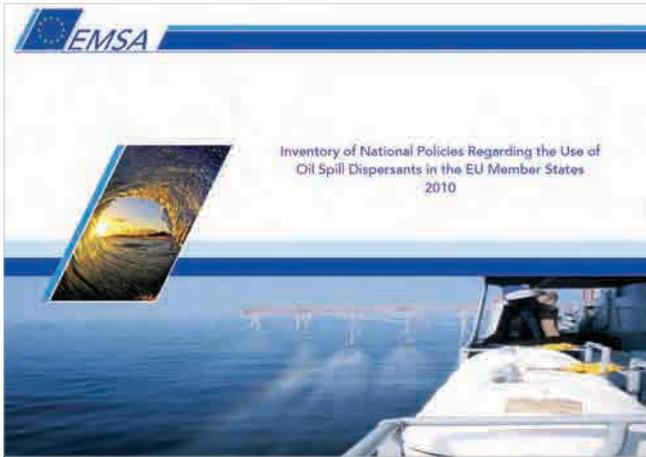
### 5.3.2 Development of vessel design requirements to enter and operate in dangerous atmospheres

As described in the HNS Action Plan, EMSA launched a tender in July 2010 to contract a study for the development of vessel design requirements in order that a vessel can enter and operate in hazardous environments – Safe Platform Study. The focus of the study will be on the utilisation of existing vessels that can be adapted and re-fitted in order to enable their utilisation in response operations to HNS incidents. It will identify and describe the modifications necessary to enable the modified vessel to enter/approach the HNS incident area and perform various operational tasks. The approach will be based on the definition of vessel design requirements categories, considering the different types of HNS response operations and the associated risks. The study will gather relevant information that will ease the

investment optimisation contributing to a wider coverage of HNS response means. It is expected to be completed in 2011.

### 5.3.3 Development of Chemical Datasheets of chemical substances for marine pollution response

Information on the short term fate and behaviour of a chemical substance once it is released in sea water is fundamental for a timely decision on the appropriate monitoring and response options to the spill, for evaluating the effects on the marine environment as well as for the health and safety of the responders and the wider public. Information on the behaviour of chemical substances in sea water is very limited and is an internationally recognised "knowledge gap" in this field.



#### 5.4 INVENTORIES OF MEMBER STATES POLICIES AND OPERATIONAL RESPONSE CAPACITIES

The Agency has been tasked to “draw up on a regular basis a list of the private and state pollution response mechanisms and response capabilities in the various regions of the European Union” in accordance with Regulation (EC) No 2038/2006. In 2010, EMSA updated its HNS and dispersant inventories: **Inventory of National Policies regarding the use of oil spill dispersants in the EU Member States** and **Inventory of EU Member States Policies and Operational Response Capacities for HNS Marine Pollution**. The oil spill dispersant inventory was first compiled in 2005 and updated in 2007; the HNS inventory was first published in 2008.

The current focus as identified in the HNS Action Plan is on the bulk transportation of liquid chemicals. In an effort to address this gap, EMSA launched a tender procedure launched in July 2010 aiming to develop datasheets for such of chemical substances for marine pollution response, on the basis of a list of pre-identified substances. These datasheets should provide concise information on each substance relevant to chemical spill response at sea, which can be used by the end user (national marine pollution response authorities) as an initial source of information following the release of a chemical substance in the marine environment, or the threat thereof.

These inventories are intended to provide a general description of the status of preparedness and response capacities of all coastal EU Member States and EFTA Contracting Parties (Iceland and Norway) to marine spills of oil and HNS. They include descriptions of the competent authorities, the policies, and the preparatory arrangements of each Member State. The revised inventories now include substantially more information such as geo-referenced response equipment and supply stockpiles and EU-wide summary maps.

A combination of factors was considered when defining the list of priority substances and to be covered under this project, focusing on bulk liquid chemicals. The list includes the most transported substances in European waters, substances involved in past incidents, substances with high toxicity.

#### 5.5 INFORMATION DISSEMINATION

EMSA has completed the procurement procedure of a 4-year Framework Contract for this project in December 2010. The work will be conducted beginning in early 2011. Once developed, these datasheets for chemical substances will be made primarily available through EMSA’s MAR-ICE<sup>16</sup> Network to the EU/EFTA Member States’ marine pollution response authorities, as an additional source of information during chemical releases in the marine environment.

The pollution preparedness and response section of the Agency website was developed and updated regularly with relevant documents and links to assist experts and public alike. The Agency continues to support the major marine pollution conference in Europe (INTERSPILL) as a member of the event’s Steering Committee<sup>17</sup>, recognising the importance of sharing spill response experience and disseminating best practice. EMSA continues its active role in the Committee meetings with the aim of ensuring EU and EFTA Member States’ issues are represented at an appropriate level and taken into consideration in preparations being undertaken for the next conference in London in March 2012.

#### 5.6 FINANCIAL OVERVIEW: INFORMATION

	COMMITMENTS	PAYMENTS
Information dissemination	168,417.33	78,617.33
Sub-total for Information	168,417.33	78,617.33

<sup>16</sup> MAR-ICE Network is an information service for use in marine chemical emergencies, established by EMSA with the support of CEFIC (European Chemical Industry Council) and Cedre (Centre of Documentation, Research and Experimentation on Accidental Water Pollution). The MAR-ICE Network provides EU Member States and coastal EFTA countries upon request, remote product-specific information and advice on chemicals involved in marine pollution incidents.

<sup>17</sup> Since 2007, EMSA has been a party to the MoU between the event’s Steering Committee members to organise the conference and exhibition on a “not-for-profit” basis.

## 6. TOTAL EXPENDITURES<sup>18</sup> FOR POLLUTION PREPAREDNESS AND RESPONSE ACTIVITIES

	COMMITMENTS	PAYMENTS
Network of Stand-by Oil Spill Response Vessels	13,504,497.94	8,928,862.73
Contracts 2005 (Baltic Sea, Atlantic and Channel, Mediterranean Sea)	0.00	1,235,712.54
Contracts 2006 (Atlantic Coast, Mediterranean East)	0.00	642,797.92
Contracts 2007 (Aegean Sea, Atlantic Coast, Mediterranean West)	0.00	2,740,078.90
Contracts 2008 (Black Sea, North Sea, Bay of Biscay)	0.00	1,551,719.80
Contracts 2009 (North Baltic, Atlantic/Channel)	0.00	1,135,613.63
Contracts 2010	4,490,000.00	1,596,155.00
Renewal Contracts 2007	8,978,733.00	0.00
Associated activities (Tender Clarification Meetings, rating reports, experts, PAMS)	35,764.94	26,784.94
Maintaining the Service: Drills and Exercises	536,649.47	533,555.61
Exercises 2009	0	33,906.14
Exercises 2010	536,649.47	499,649.47
Improvements to the Network Service	7,017.00	770,337.36
Improvements 2009 to the existing arrangements	0	770,337.36
Improvements 2010 to the existing arrangements	7,017.00	0
CleanSeaNet Service Implementation and Use	4,753,000.00	2,012,857.01
Satellite image licences	910,000.00	690,620.00
Satellite image processing (V1)	1,783,000.00	1,322,237.01
Satellite image processing (V2)	2,060,000.00	0.00
Support to CleanSeaNet Users	185,278.43	91,693.52
CSN User Group meetings	0.00	0.00
CSN User trainings and Workshops	185,278.43	91,693.52
CleanSeaNet Service Developments	930,410.76	1,608,151.70
CSN V1 - maintenance and running costs	36,066.60	420,332.00
CSN V2 - maintenance and running costs	2,000.00	0.00
CSN V1 improvements	4,999.00	52,895.52
CSN DC improvements	28,383.20	28,383.20
Oil Spill Services set-up	1,330.96	1,330.96
External programs, projects	414,900.00	106,666.67
CSN 2 <sup>nd</sup> Generation: "CleanSeaNet Data Centre" set-up	0.00	630,000.00
CSN 2 <sup>nd</sup> Generation: "CleanSeaNet services" set-up	442,731.00	368,543.35
Cooperation and Coordination	93,694.69	61,897.70
2009 CTG Meeting	74,894.69	51,146.49
EMPOLLEX	18,000.00	7,999.13
Activities in the field of dispersants	800.00	2,752.08
IMO / Regional Agreements	0.00	0.00
Information	168,417.33	78,617.33
Information dissemination	168,417.33	78,617.33
Related missions of EMSA Staff	151,000.00	107,805.20
TOTAL allocated	20,500,000.00	17,500,000.00
TOTAL utilised	20,329,965.62	14,534,489.07

<sup>18</sup> The figures in this report are based on preliminary figures available for 2010. They are subject to verification and confirmation as part of the final accounts of the Agency, which will be checked by the Court of Auditors. Therefore, the final figures may deviate from the figures presented in this report.



## About EMSA

The European Maritime Safety Agency is one of the European Union's decentralised agencies. Based in Lisbon, the Agency provides technical assistance and support to the European Commission and Member States in the development and implementation of EU legislation on maritime safety, pollution by ships and maritime security. It has also been given operational tasks in the field of oil pollution response, vessel monitoring and in long-range identification and tracking of vessels.



<http://www.emsa.europa.eu>