EMSA

European Maritime Safety Agency

Pollution Preparedness and Response Activities

January 2012

EMSA's 2012 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

EUROPEAN MARITIME SAFETY AGENCY

Table of contents

Printed on chlorine-free paper

1. REPORT OBJECTIVE

The European Maritime Safety Agency has been given a multi-annual financial envelope for its 'anti-pollution' activities. One of the conditions for receiving this is that the Agency submits 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[1], 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 distributed along the European coastline;
- CleanSeaNet, the satellite based oil spill and vessel detection and monitoring service covering European waters;
- The MAR-ICE Information Service in case of chemical spills at sea;
- Cooperation and coordination with Member States, Candidate Countries, Regional Agreements and the IMO;
- The provision of information through publications and workshops.

Following successful procurement procedures in 2011, four new contracts were awarded to enhance the response capacity for Western Mediterranean and the Black Sea and to replace existing capacity in the Southern Baltic and Central Mediterranean Sea. The Stand-by Oil Spill Response Vessel Network continues to cover all the regional seas of Europe, in line with the Key Performance Indicator[2] established for geographical coverage.

The tanker *Alexandria* contracted in 2010 and based in Limassol, Cyprus, became fully operational in 2011 and reinforces the Network in the Eastern Mediterranean.

Two vessels under contract with the Agency were substituted. Following a Preparatory Phase, the replacement vessels *Balluta Bay* and *Aegis I* were brought into operational service.

2011 also saw the renewal of two contracts awarded in 2008 to provide response capacity for the Atlantic Coast and the Black Sea.

Following a technical assessment on operational needs and opportunities to upgrade the response capacity of the Network, two improvement projects were launched.

In parallel, five separate framework contracts for the purchase of oil pollution response equipment were concluded with different companies. The framework contracts will ensure the availability of the equipment necessary to accomplish present and future improvement projects to the Network. For the first time, a public sale was successfully concluded for equipment under an expiring contract.

In order to maintain a high level of preparedness of the service network, 64 drills were conducted on board EMSA contracted vessels in 2011. In addition, 13 Notification exercises were conducted with Member States. To further strengthen the operational cooperation with Member States, 13 EMSA contracted vessels participated in 11 Operational exercises covering all European seas.

CleanSeaNet, the Agency's satellite oil pollution and vessel detection monitoring service, has been operational since 2007. In 2011 the new in-house Data Centre became fully operational, and the second generation of the service is now being delivered to users. Iceland and Turkey became full users of the service, bringing the total number of coastal States using CleanSeaNet to 26.

The Consultative Technical Group for Marine Pollution Preparedness and Response (CTG-MPPR), established in 2007, continued its work in 2011 with its annual meeting, updating the Rolling Work Programme activities, continuing the EMPOLLEX expert exchange programme and organising a training workshop on aerial surveillance for marine pollution detection.

1 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.

2 As defined in the EMSA Work Programme 2011: http://www.emsa.europa.eu/news-a-press-centre/external-news/item/121-emsa-work-programme.html.

A new Vessel Network User Group was established and the first meeting of the Group was held at EMSA in October 2011.

The MAR-ICE Network (Marine-Intervention in Chemical Emergencies Network), established in 2008, was evaluated and subsequently extended until the end of 2014. It will continue to provide information during actual HNS spills and to support 'table top' pollution exercises. In addition to EU Member States and coastal EFTA States, the service has been extended to EU Candidate Countries.

Funding of Actions

The Budgetary Authorities provided EMSA with € 23 million in commitment and € 20 million in payment appropriations for its pollution preparedness and response task for 2011[3]. In terms of budget execution, 98% was achieved for commitments and 88% for payments.

Whilst the overall execution in commitment appropriations was nearly 100%, the execution in payment credits was lower (88%). 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[4].

	COMMITMENTS	%	PAYMENTS	%
TOTAL allocation	23,000,000.00	100	20,000,000.00	100
TOTAL utilised	22,543,496.36	98.01	17,655,325.69	88.27

The vast majority of appropriations (97.70%) 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.

3 The Agency requested €20 M EUR in payment appropriations, but was mistakenly given €23 M EUR. For reporting purposes, EMSA will report against the €20 M EUR originally requested.

4 See footnote 3.

	COMMITMENTS	%	PAYMENTS	%
Operational allocation	22,025,076.15	97.70	17,204,016.22	97.44
Cooperation and coordination	146,831.87	0.65	96,932.56	0.55
Information	227,078.34	1.01	244,642.70	1.39
Related missions of EMSA staff	144,510.00	0.64	109,734.21	0.62

2. INTRODUCTION

The European Maritime Safety Agency (EMSA) was established[5] 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[6]. The activities identified in the Action Plan are updated annually and approved by EMSA's Administrative Board as part of the annual Work Programme. With the adoption of Directive 2005/35/EC as amended on ship-sourced pollution[7], 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[8]. 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 fifth annual report and covers the year 2011. EMSA's activities under the umbrella of the Multi-Annual Funding Regulation are presented, and described in more detail in these three categories:

5 See Founding Regulation 1406/2002/EC, Article 1 (Objectives).

6 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: http://www.emsa.europa.eu.

7 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).

8 A financial perspective is a seven-year spending framework of the European Union.

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

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 may be detailed in their national contingency plan.

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 distributed along the European coastline and tasked to recover oil from the sea surface; and
- CleanSeaNet: the satellite based oil spill and vessel 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, 2011 saw three main activities in relation to the Network namely:

- Bringing into operation the vessel contracted at the end of 2010;
- Securing replacement capacity for expiring contracts in the Southern Baltic and Central Mediterranean and establishing new capacity for the West Mediterranean and Black Sea areas through a public procurement procedure[9];
- Determining if the contracts established in 2008, one for the Atlantic Coast, one for the Black Sea and one for the North Sea, should be renewed for an additional (and final) 3-year period.

9 The tender for the Bay of Biscay was not successful.

Associated activities included:

- Maintaining the service level for operational contracts primarily through:
  - Monitoring and evaluating 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[10];
  - Supervising the acceptance of two substitute vessels to maintain capacity in the Mediterranean Sea.
- 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 Monitoring and Information Centre (MIC) of the European Commission in Brussels[11].

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

10 '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).

11 The Monitoring and Information Centre (MIC) is the heart of the Community Mechanism for Civil Protection. It is operated by DG Humanitarian Aid & Civil Protection (DG ECHO) of the European Commission and accessible 24 hours a day. It plays a key coordination role during emergencies.

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;
- 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 spilt 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 Organisations in accordance with Directive 94/57/EC[12] 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

EMSA currently maintains contracts for 16 fully equipped Stand-by Oil Spill Response Vessels, which are available, upon request, to assist coastal States in oil spill recovery operations. Four additional contracted vessels are currently in the preparatory phase and are expected to be operational by mid-2012. Two contracts will expire in the intervening period, bringing the total number of available vessels to 18. The average storage capacity for recovered oil of the EMSA contracted vessels is 3,200 m^3.

The current Network provides at-sea oil recovery services from vessels based in all the regional seas of Europe. It should be noted that all vessels are at the disposal of all Member States regardless of their actual area of operation. The map (p.11) shows the distribution of vessels and equipment stockpiles around Europe. 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.

Within the framework of the Agency's annual Work Programme, 2011 saw a further procurement procedure 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 five different geographical areas (lots):

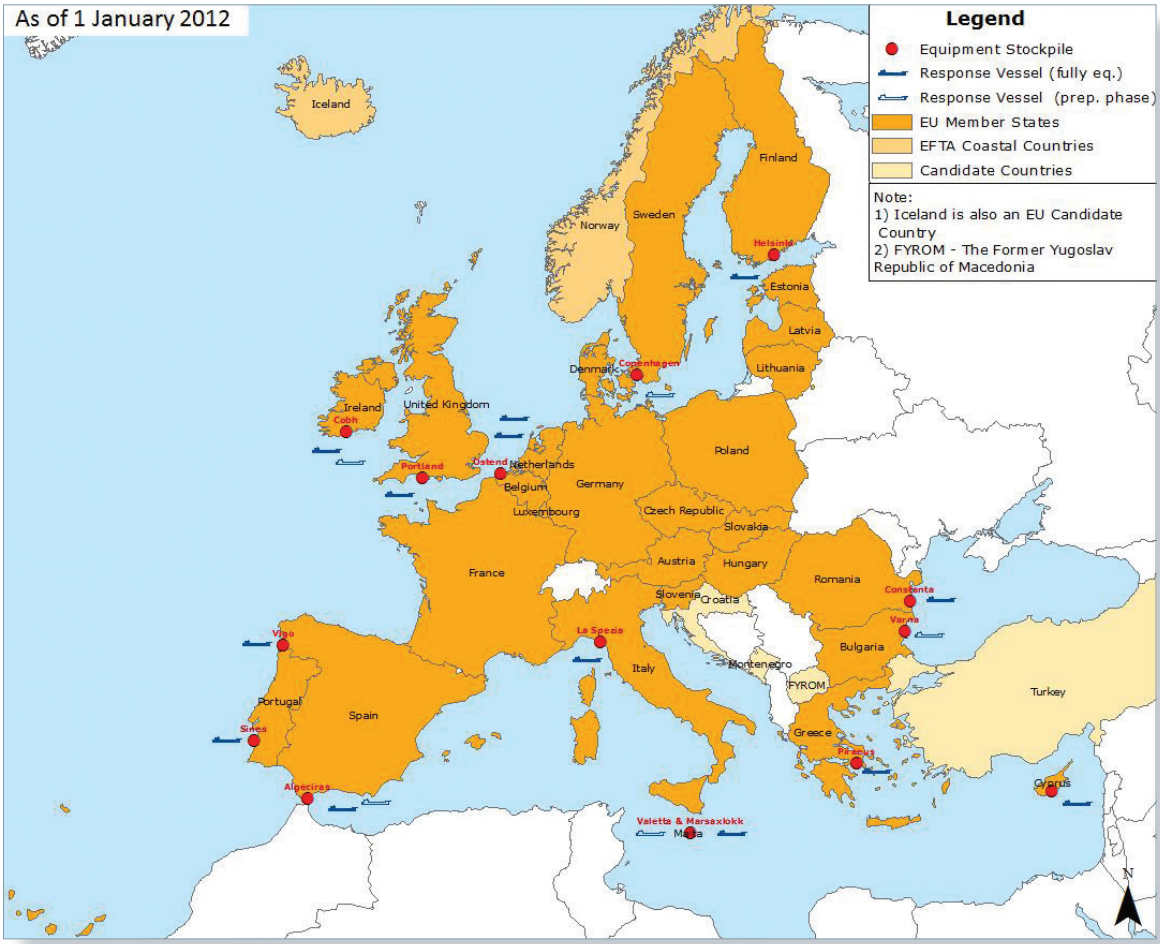
- The Southern Baltic Sea;
- Bay of Biscay;
- Western Mediterranean Sea;
- Central Mediterranean Sea; and
- Black Sea.

As in previous years, the Negotiated Procedure had two different phases and is effectively a yearlong project in itself. Following the procurement procedure, contracts for response capacity were awarded for all geographical areas except the Bay of Biscay.

In parallel, and in line with the Key Performance Indicator (KPI)[13] for the pre-fitting of newly contracted vessels, one company contracted at the end of 2010, Petronav Ship Management with the vessel *Alexandria* for the Eastern Mediterranean area, successfully completed the Preparatory Phase and entered the Stand-by Phase. Specifically, this means that the vessel was modified and equipped, and the crew trained for their pollution response task. Following certification of the vessel for oil recovery operations by an appropriate Classification Society (Recognised Organisation in accordance with Directive 94/57/EC as amended), the vessel was accepted into the Stand-by Phase of the contract and is available to respond to a request from a coastal State for assistance. The *Alexandria* has an impressive storage capacity of 7,458 m^3 and transports oil between Haifa and Cyprus mainly for its own bunkering vessels. The pollution response equipment will be permanently stored on board.

12 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.

13 As defined in the EMSA Work Programme 2011: http://www.emsa.europa.eu/news-a-press-centre/external-news/item/121-emsa-work-programme.html KPI 55: number of newly contracted vessels: all regional sea basins.



The Network of Stand-by Oil Spill Response Vessel Service at the beginning of 2012.

In 2011, two vessels under contract with the Agency were replaced. Following a Preparatory Phase, the vessels *Balluta Bay* and *Aegis I* (back-up vessel of *Aktea OSRV*) were brought into operational service, replacing the response capacity provided by the *Mistra Bay* and the *Aegis* respectively.

THE BALTIC SEA

Due to the expiration of the current contract for the Southern Baltic (for the vessels *OW Copenhagen* and *OW Aalborg*) at the end of this year, a new contract has been signed with O.W. Tankers and the Stand-by Phase is expected to begin in mid-2012 at the latest. The bunker vessel *O.W. Copenhagen*, already operating for EMSA under the current contract, will be re-contracted under the new contract, ensuring the availability of a total net storage capacity of 4,450 m^3.

The Baltic Sea is also served by the ice-breaker *Kontio* which entered into the Operational Phase in 2010. It was built in 1987, has a speed of 18.5 knots and a recovered oil capacity of 2,033 m^3. During the ice-breaking season, approximately 140 days a year, the vessel operates 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 are located in Helsinki, Finland.

With the aforementioned new contractual arrangement in place, the total contracted on board storage capacity for oil recovery during response operations for the Baltic Sea will now be almost 6,500 m^3.

THE NORTH SEA

The North Sea is one of the sea areas with the highest tanker traffic density and EMSA has a 3-year contract for two hopper dredgers trading sand along the Belgian and Dutch coastlines. The *Interballast III* (storage capacity 1,886 m^3) and *DC Vlaanderen 3000* (storage capacity 2,744 m^3) entered into operational service in 2009 and provide

a combined recovered oil storage capacity of more than 4,500 m^3. The initial contract for these vessels will come to an end in late June 2012, therefore an assessment of the performance of the vessels during the contract implementation will be carried out in order to determine whether a contract renewal for a further three years should be put in place.

ATLANTIC COAST

The Western Approach of the English Channel, an area well known for its vessel traffic density, is served by the *Sara*, based in Portland, UK, and the arrangement based in Cobh, Ireland, through the Contractor James Fisher Everard composed of three vessels (two product tankers and an oil tanker with a total storage capacity of 14,536 m^3). These vessels are complemented by the arrangements in place along the Atlantic coast. The supply ship *Ria de Vigo*, which has an on board storage capacity 1,522 m^3 and operates out of Vigo, Spain, had her contract renewed for three years from 1 January 2012. Finally, the *Bahia Tres*, built in 2007 and based in Sines, Portugal, has 7,413 m^3 of onboard recovered oil storage capacity.

The total recovered oil storage capacity under contract is therefore in excess of 20,000 m^3 for the Atlantic coast from the English Channel to Europa Point.

MEDITERRANEAN SEA

Following successful procurement procedures, two new 4-year contacts have been awarded for the provision of at-sea oil recovery services in the Mediterranean basin.

The *Monte Anaga* is a new tanker built in 2010 with a storage capacity of 4,200 m^3. She is contracted from the Spanish company Naviera Altube and will be based in Algeciras, Spain, a sensitive sea area given its proximity to major oil transport routes transiting the Gibraltar Strait. The *Monte Anaga*, currently engaged in bunkering services in the Bay of Gibraltar, will strengthen EMSA's oil spill response coverage of the Western Mediterranean Sea.

The other new contract is for the replacement of existing response capacity in Central Mediterranean due to the expiration, without possibility of further renewal, of the contract signed in 2005 for the provision of stand-by oil spill response services by the *Mistra Bay*.

The Monte Anaga, currently engaged in bunkering services in the Bay of Gibraltar, will strengthen EMSA's oil spill response coverage of the Western Mediterranean Sea.

The replacement vessel is the tanker *Balluta Bay*[14], contracted from the Maltese company Tankship Management Ltd. As part of the Preparation Phase, the *Balluta Bay* will undergo an ambitious plan of improvements to the vessel's on board systems and oil pollution response equipment. This will include the relevant modifications to upgrade the Class Certificate in order that the vessel can operate in areas with a Flash Point below 60°C.

The *Alexandria*, for which a 4-year contract was awarded for the provision of at-sea oil recovery services at the end of 2010, entered into the Stand-by Phase of the contract in September 2011.

With regard to this regional sea basin, the following arrangements are also in place:

- *Bahia Uno*, based in Algeciras, Spain;
- *Salina Bay*, based in La Spezia, Italy;
- *Santa Maria*, based in Malta; and
- *Akea OSRV*, supported by the back-up vessel *Aegis I*[15], based in Piraeus, Greece.

With the entry into operational service of the vessels *Monte Anaga* and *Balluta Bay* in mid-2012 the total net storage capacity under contract for the Mediterranean Sea will be in the region of 26,000 m^3.

THE BLACK SEA

Oil transportation through the Black Sea and the East Mediterranean Sea, where important pipelines feed out of Russia and the Caspian area, pose a serious risk. In order to strengthen the Network in this area, following a successful procurement procedure a 4-year contact has been awarded to the Bulgarian company BM Gust. The vessel providing the contracted at-sea oil recovery services is the offshore supply vessel *Enterprise*. She has a storage capacity of 1,374 m^3 and services the Varna oilfield area about 12 nautical miles offshore.

The initial contract for the EMSA contracted vessel *GSP Orion*, operating out of Constanta, Romania, expired at the end of 2011. An assessment of the performance of the vessel during the contract implementation was carried out and, following a favourable evaluation, a contract renewal for a further three years has been signed.

With the aforementioned new contractual arrangement in place, the total contracted on board storage capacity for oil recovery for the Black Sea will now be more than 2,700 m^3.

14 During 2011, the Balluta Bay replaced the Mistra Bay within the context of the service contract signed in 2005, which expired on 31 December 2011.

15 In 2011, the Aegis I has replaced the Aegis as back-up vessel of the Aktea OSRV.

Financial overview: vessel contracts

	COMMITMENTS	PAYMENTS
Contracts 2005 (Baltic Sea, Atlantic and Channel, Mediterranean Sea)	0.00	985,589.90
Contracts 2006 (Atlantic Coast, Mediterranean East)	0.00	825,000.00
Contracts 2007 (Aegean Sea, Atlantic Coast, Mediterranean West)	0.00	2,190,367.00
Contracts 2008 (Black Sea, North Sea, Bay of Biscay)	0.00	1,287,158.50
Contracts 2009 (North Baltic, Atlantic/Channel)	0.00	1,189,143.64
Contracts 2010 (Mediterranean East)	0.00	489,716.27
Contracts 2011 (Southern Baltic, Mediterranean Central, Mediterranean West and Black Sea)	13,465,633.89	4,750,702.91
Renewal Contracts 2008	3,557,856.00	0.00
Associated activities (Tender Clarification Meetings, rating reports, experts, PAMS)	27,765.69	36,100.65
Sub-total 3.1.1	17,051,255.58	11,753,778.87

Participants of the 1st Vessel Network User Group meeting at EMSA.

3.1.2 *Vessel Network User Group*

During the Stakeholders Consultation in the context of preparing the Agency's contribution to the Multi-annual Funding Mid-term Report[16], the establishment of a Vessel Network User Group was proposed. The Group was set up accordingly and a first meeting was held at the end of October 2011 at EMSA's premises. In addition to EMSA, there were participants from 16 different Member States, one EFTA Member State and three Candidate Countries.

The aim of this User Group is to strengthen the existing communication among the end users of the Stand-by Network and to facilitate the exchange of improvement proposals. Furthermore, the members of the User Group have the opportunity to express their opinions and make proposals on technical and operational issues of the Network and feedback is appropriately channelled to the relevant parties.

Following the highly constructive initial meeting, Vessel Network User Group Meetings will be held once per year at the EMSA premises.

3.1.3 *Maintaining the Service: Drills and Exercises*

3.1.3.1 Drills

In order to maintain the appropriate level of readiness during the Stand-by Period of the contracts, the companies and vessels concerned carry out different types of activities. The primary activity is the vessel/crew drills which take place on a quarterly basis. Each drill verifies that the capability of the vessel and specialised equipment, and the skill of the crew, is at an appropriate level.

These drills are primarily an internal event between the Agency and contractors. However in 2011 a Member State representative from the Irish Coast Guard took part in a drill for the first time, and the Agency encourages such participation in future drills.

In 2011, a total of 60 Quarterly Drills were performed by the vessels under contract to the Agency. Additionally, four Acceptance Drills were conducted in 2011. 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.

A Re-acceptance Drill was also carried out subsequent to the re-delivery of the TransRec skimmer package that was sent to the Gulf of Mexico to support the response actions to the Deepwater Horizon oil spill following the request for assistance by the US authorities in 2010. The equipment was re-installed onboard the EMSA contracted vessel *Ría de Vigo* in March and was successfully tested and found to be operational in the presence of representatives from the Contractor, the manufacturer and EMSA. Whilst the equipment was certainly appreciated during the pollution response and was returned in a timely manner, the procedure to initiate the payment by British Petroleum for the necessary repairs to the equipment has been rather cumbersome.

16 *Multi-annual Funding Mid-term Report: http://www.emsa.europa.eu/opr-documents/item/617-multi-annual-funding-mid-term-report-emsas-contribution.html; Multi-annual Funding Regulation: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0001:0004:EN:PDF*

Acceptance Drills conducted by the Agency in 2011

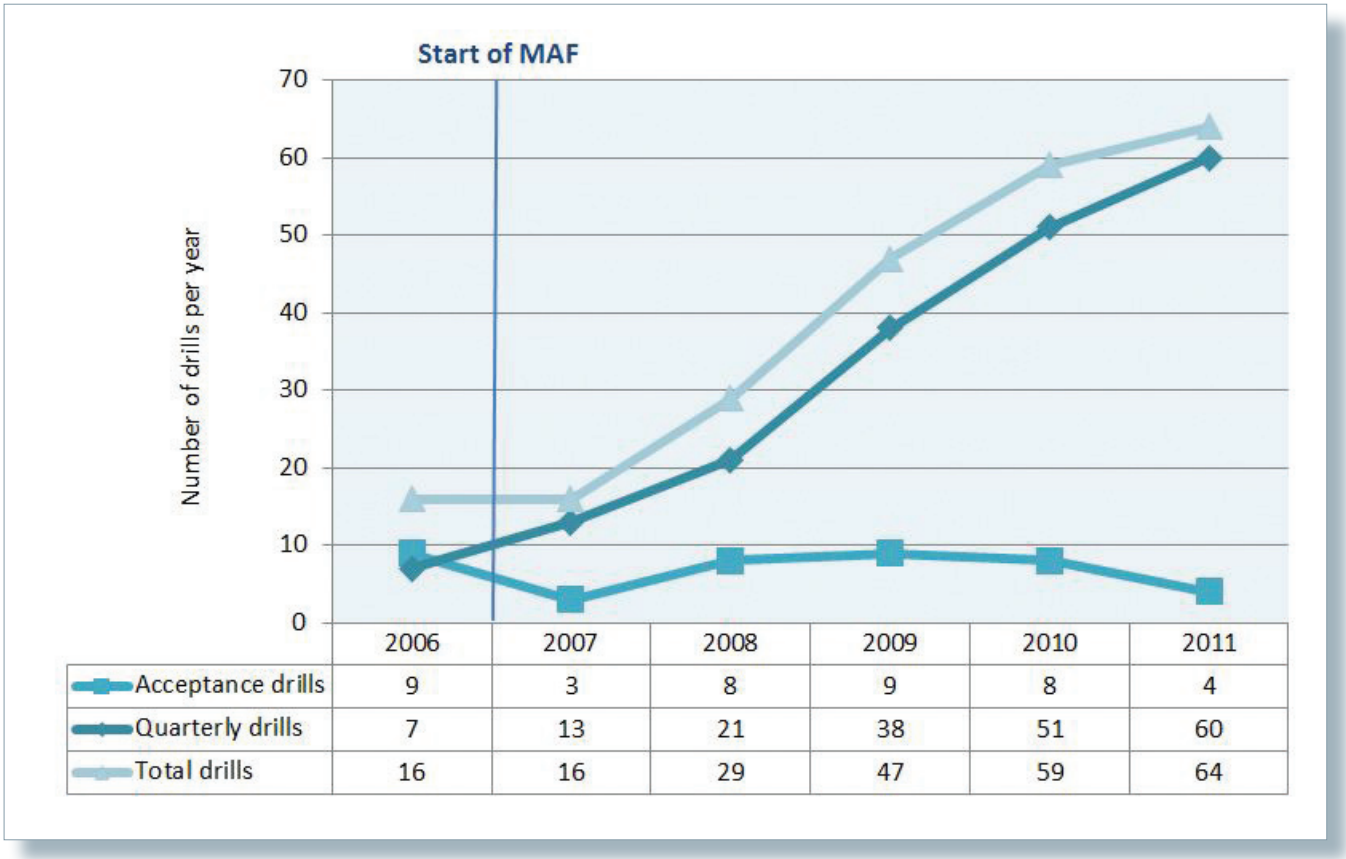
ACCEPTANCE DRILL	REMARKS
Newly contracted vessel: ***Alexandria***	Entry into Stand-by Phase of the Contract
Replacement vessel: ***Balluta Bay*** Back-up vessel: ***Aegis I***	Replacement for the *Mistra Bay* Back-up of *Aktea OSRV* within EPE Contract
Re-acceptance Drills: ***Ria de Vigo***	Acceptance Drill following the return of the high capacity skimmer following Deepwater Horizon oil spill

Acceptance Drills are also used in order for any technical improvements to the Network to be recognised as operational, whilst this was not the case in 2011, two technical improvement projects were launched, which will be subject to acceptance tests early in 2012:

- Improvement of the pollution response capacity of the *Aktea OSRV* for the Aegean Sea. A Normar 250 high capacity skimmer will be added to the equipment available.
- Upgrade of the existing pollution response capacity of the pool of the 3 vessels contracted through James Fisher Everard for the Atlantic Coast. One set of 15 m rigid sweeping arms will be added to the Contractor's stock pile arrangement in Cobh, Ireland.

The summary of all drills performed by EMSA contracted vessels during the period 2006-2011 is shown in the chart below. The total number of drills (Quarterly and Acceptance Drills) was 64. This figure exceeds the number of drills specified in the Key Performance Indicator[17] for 2011 of 57.

17 As defined in the EMSA Work Programme 2011: http://www.emsa.europa.eu/news-a-press-centre/external-news/item/121-emsa-work-programme.html



	2006	2007	2008	2009	2010	2011
Acceptance drills	9	3	8	9	8	4
Quarterly drills	7	13	21	38	51	60
Total drills	16	16	29	47	59	64

Number of drills per year

3.1.3.2 Exercises

In addition to the abovementioned drills, a range of exercises were conducted. These types of event 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. In the course of 2011, 13 EMSA Stand-by Oil Spill Response Vessels participated in 11 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. The Key Performance Indicator[18] for exercises for the year was eight and therefore the Agency surpassed the target established.

Operational exercises usually involve the release of simulated oil (often popcorn), the deployment of pollution response vessels from the participants, the establishment of a unified command structure and lines of communication. 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. The total number of Exercise Days with the participation of EMSA contracted vessels was 13.

In connection with the operational exercises, 13 notification exercises, aiming to evaluate the agreed emergency and notification procedures between EMSA, Member States, EMSA contractors and the MIC, were organised by the Agency. The Key Performance Indicator[19] for notification exercises was 12 and this number of exercises was achieved. As a result of the notification exercises, seven exercise Incident Response Contracts were signed between different coastal States and EMSA Contractors. In the light of this

18 As defined in the EMSA Work Programme 2011: http://www.emsa.europa.eu/news-a-press-centre/external-news/item/121-emsa-work-programme.html KPI 57: number of operational exercises per year: 8.

19 As defined in the EMSA Work Programme 2011: http://www.emsa.europa.eu/news-a-press-centre/external-news/item/121-emsa-work-programme.html KPI 58: number of notification exercises per year: 12.

At-sea operational exercises in chronological order in 2011:

EXERCISE NAME	DATE, LOCATION	PARTICIPATING PARTIES	EMSA VESSELS
FOZ 2011	04/05/2010 Lisbon, Portugal	Portugal, EMSA	*Bahia Tres*
ORSEC POLMAR 2011 (North Sea)	31/05/2011 Dunkerque, France	France, Belgium, Germany, EMSA	*Sara*
ORSEC POLMAR 2011 (Bay of Biscay)	16/06/2011 Lorient, France	France, EMSA	*Galway Fisher*
BALEX DELTA 2011	30/08/2011 Ronne, Denmark	Denmark, Lithuania, Latvia, Poland, Russia, Germany, Sweden, Finland, EMSA	*OW Copenhagen*
MALTEX 2011	14/09/2011 La Valetta, Malta	Malta, EMSA	*Balluta Bay*
GEODELTA 2011	15/09/2011 Batumi, Georgia	Georgia, Bulgaria, Romania, Turkey, Ucraine, EMSA	*GSP ORION*
CEX-2011 COPENHAGEN AGREEMENT	28/09/2010 Nynashamn, Sweden	Sweden, Denmark, Finland, Iceland, Norway, EMSA	*Kontio*
THE NETHERLANDS-EMSA EXERCISE 2011	03/10/2010 Vlakte van de Raan, The Netherlands	The Netherlands, Belgium, EMSA	*DC Vlaanderen 3000 and Interballast III*
NIRIIS 2011	06/10/2011 Limassol, Cyprus	Cyprus, EMSA	*Alexandria*
RAMOGEPOL 2011	24/10/2011 Genoa, Italy	Italy, France, Monaco, Spain EMSA	*Salina Bay*
JOINT SPAIN-EMSA EXERCISE 2011	16/11/2011 Algeciras Bay, Spain	EMSA, Spain	*Bahía Uno*
11 Operational Exercises	13 Exercise Days	24 EMSA counterparts	13 different EMSA vessels

rather low figure, it is important to reinforce the need for Member States, even in an exercise scenario, to conclude the notification procedure with the signature of the Incident Response Contract as this is a vital legal element in requesting assistance from EMSA in the event of an actual incident.

The CECIS system operated by the Monitoring and Information Centre (MIC) of DG ECHO (Humanitarian Aid & Civil Protection) of the European Commission should be used by Member States for the mobilisation of vessels; however, in practice this does not always occur. EMSA is working closely with DG ECHO in order to improve the functionality and use of the CECIS system[20].

EXERCISE FOZ 2011 (ATLANTIC COAST)

On 4 May 2011, the at-sea pollution response exercise FOZ 2011 was held off Figueira da Foz, Portugal. The exercise was organised by the Portuguese National Maritime Authority (Autoridade Marítima Nacional, DGAM) with 22 different participating entities including EMSA. The aims of this operational exercise were to test and to improve the cooperation of the Portuguese Navy and DGAM with other entities, particularly local authorities and port administrations, as well as to strengthen the integration of the Agency's contracted vessel *Bahia Tres* based in Sines, Portugal, at the operational level with the Portuguese vessels.

In conjunction with the operational exercise, a notification exercise involving the requesting Member State (Portugal) and EMSA was also carried out for the mobilisation of the EMSA contracted vessel. The Incident Response Contract was signed by the Contractor and the Member State in less than two hours from the formal request for assistance, which can be considered as timely implementation.

The exercise was based on the collision of a merchant vessel with the north pier port of Figueira da Foz. As a result of

20 The Common Emergency and Information System (CECIS) is a web-based alert and notification application created to facilitate emergency communication. It provides a platform to send and receive alerts and details of assistance requested and offered.

Simulation of oil recovery with skimmer.

Sara with sweeping arms extended during the ORSEC POLMAR 2011 exercise.

the accident, the vessel suffered significant damage to her hull. A spillage of about 500 m^3 of intermediate fuel oil 180 occurred. Following the activation of the Portuguese Contingency Plan and the request for assistance to MIC/EMSA, oil recovery operations were undertaken together with a shoreline clean-up.

The FOZ 2011 exercise was a positive experience for all the participants. The exercise scenario was considered to be very realistic and the role of the *Bahia Tres* as an oil recovery vessel was successfully demonstrated. The 'oil recovery operations' were well executed and the crew of the EMSA contracted vessel showed a high level of motivation. *Bahia Tres* fulfilled the role assigned by the Member State for this exercise and the Agency was also satisfied by its performance.

EXERCISE ORSEC POLMAR 2011 (NORTH SEA)

On 31 May 2011, ORSEC POLMAR 2011 (North Sea) was held off Dunkerque, France. The exercise was organised by the Préfecture Maritime de la Manche et de la Mer du Nord. The aim of this operational exercise was to test and to improve the cooperation of the national and regional French Authorities with other entities, particularly local authorities and port administrations as well as to strengthen the integration of the Agency contracted vessel *Sara*, based in Portland, UK, at the operational level with the ships of Member States. In addition to French vessels, vessels from Belgium and Germany also took part in the at-sea 'oil recovery' operations.

The exercise scenario simulated a collision between two merchant vessels in the vicinity of the Port of Dunkerque on 30 May. As a result of the accident, both vessels suffered significant damage. The situation was analysed by the Crisis Centre involving the French Navy, maritime and local authorities. Following the activation of the relevant French Contingency Plan (Préfecture Maritime de la Manche et de la Mer du Nord) appropriate response vessels and other resources were mobilised. Oil recovery operations were undertaken in the area between Dunkerque and Calais on 31 May.

The oil recovery operations were carried out in adverse weather conditions. With a wind force between 5 to 6 Beaufort and a wave height of over 2 m, the waves created a splash over the sweeping arms at even the lowest sweeping speed. In these weather conditions the skimming of the water surface could not be carried out correctly. The popcorn used to simulate the oil spill was not observed in the exercise area and the aircraft also failed to identify the 'oil spill.' The reasons for this could be the small quantity of popcorn dropped or that the popcorn sank due to the weather conditions.

The exercise was nevertheless a positive experience for all the participants in challenging circumstances and the coordination between the different units was positively tested. The EMSA contracted vessel *Sara* fulfilled the role assigned to it by France, the organising Member State, and also met the Agency's expectations.

EXERCISE ORSEC POLMAR 2011 (BAY OF BISCAY)

The at-sea marine pollution response exercise ORSEC POLMAR 2011 (Bay of Biscay) was organised by the Préfecture Maritime de la Atlantique and held off Lorient, France, on 16 June 2011. The two major objectives were to deal with vessels in distress as carried out on 15 June and the oil recovery operations as exercised on 16 June.

The aim of the operational exercise was to test and to improve the cooperation of the respective French Authorities with other entities, particularly local authorities and port administrations, and to strengthen the integration of the Agency's vessel *Galway Fisher*, contracted from James Fisher Everard and based in Cobh, Ireland, at the operational level with ships of the Member State. Observers from Spain, Portugal and Morocco were present on board the French Naval vessel *BSAD Argonaute* and in the Crisis Centre.

The exercise scenario simulated a collision between the tanker *Guyenne* and the cargo vessel *Teresa* off the Lorient coast. As a result of the accident, the tanker suffered significant damage. Following analysis of the incident by the Crisis Centre, evaluation and intervention teams were sent on board the vessel. Assistance was given by a tug towing the vessel to a place of refuge. After the sinking of the tanker, on 16 June, the Préfecture Maritime de la Atlantique requested assistance, including mobilisation of the EMSA oil recovery vessel *Galway Fisher*. Oil recovery operations were undertaken in the area between Lorient and Brest on 16 June.

The EMSA contracted vessel *Galway Fisher* deployed only its sweeping arms for a total time of approximately 1.5 hours due to the rough sea and wave heights of more than three metres. The *Galway Fisher* nevertheless performed satisfactorily and met the requirements of both the Agency and the French authorities.

EXERCISE BALEX DELTA 2011 (BALTIC SEA)

BALEX DELTA operational response exercises have been held annually since 1989. This operational exercise is the largest maritime emergency and counter-pollution exercise of its kind in the Baltic Sea area and one of the largest worldwide. The BALEX DELTA 2011 exercise took place off Ronne, Denmark, on 30 August 2011. The exercise included the participation of 14 oil spill response vessels from 9 different HELCOM contracting parties and a surveillance helicopter. EMSA participated in the exercise with the *OW Copenhagen*. Other participating vessels were: *Scharhörn* (Germany), *KBV 003* and *KBV 047* (Sweden), *Kapitan Poinc* and *Planeta* (Poland), *Gunnar Thorson*, *Eno* and *Hjorto* (Denmark), *Merikarhu* and *Louhl* (Finland) *A-90 Varonis* (Latvia), *Sakiai* (Lithuania) and *Yasnyy* (Russia).

EXERCISE BRIEFING DURING BALEX DELTA

The goals of the exercise were to test the alarm procedure, the response capability and the response time of the Contracting Parties, and to test and train the staff and the cooperation between oil combating units of the Contracting Parties. The exercise was based on the simulation of a collision between an oil tanker and a trawler in the waters between the island of Bornholm (Denmark) and Sweden, resulting in an oil spill of approximately 5,000 tonnes of crude oil. As a result of the accident, the trawler did not suffer any serious damage; however the oil tanker had a large gash mainly above the water line.

Due to adverse weather conditions (winds 15-20 m/s), the participating vessels were instructed by the Supreme On-scene Commander to maintain a large distance between the units. Each of the masters was also given the freedom to choose to deploy oil spill recovery equipment or just to simulate recovery operations. Given the weather conditions

The Santa Maria took part in MALTEX 2011.

and in particular the wind direction, it was decided that the EMSA contracted vessel, *OW Copenhagen*, would deploy its sweeping arms individually, keeping the deployed arm in the water from the lee side of the vessel only. It should be noted that the *OW Copenhagen* was one of the few vessels that actually deployed its oil recovery equipment given the weather conditions.

BALEX DELTA 2011 was a positive experience for the participants and the coordination between the different units was successfully tested. The large number of vessels taking part presented a real challenge, particularly in view of the adverse weather which highlighted that such conditions could indeed occur in a real situation.

EXERCISE MALTEX 2011 (CENTRAL MEDITERRANEAN)

On 14 September, the MALTEX 2011 oil spill response exercise, organised by Transport Malta, was conducted off La Valletta, Malta. The *Balluta Bay* and the *Santa Maria*, contracted from Tankship and Falzon respectively, both based in Malta, took part in this exercise.

The exercise scenario simulated a collision of the tanker *Oiltank 1* with another vessel due to bad weather conditions. The tanker broke in two and finally sank, while heavy fuel oil was leaking to the surface in a radius of approximately 1 nautical mile.

The *Balluta Bay* was chosen as the leading vessel to coordinate the different units participating in the exercise. The *Spinola* and the *Felica* (two Maltese tugboats) deployed a boom (250 m) in a J-formation, and deployed the *Spinola*'s skimmer. A third tugboat (*St Rocco*) was standing by the formation. After the boom deployment, *Balluta Bay* and *Santa Maria* were ordered to deploy their sweeping arms and simulate oil recovery in parallel to the other formation. EMSA's vessels performed well during the exercise. The coordination with other units, led by the *Balluta Bay*, was very good. Overall, the exercise was a good opportunity for the participating units to improve the coordination during oil pollution response operations.

GSP Orion deploying sweeping arms.

EXERCISE GEODELTA 2011 (BLACK SEA)

The Black Sea Delta Regional Exercise GEODELTA 2011 was organized under the framework of the Bucharest Convention and regional cooperation mechanism of the Black Sea Contingency Plan. GEODELTA 2011 was hosted by Georgia and took place on 15 September off the coast of Batumi. These Regional operational exercises are organised by the Black Sea riparian countries every two years on a rota basis.

The exercise scenario simulated the collision between the tanker *Nord Wind*, loaded with Azeri crude oil, with the Ro-Ro vessel *Anna Maria* approximately five nautical miles offshore. As a result of the collision the tanker sustained damage to her cargo tanks and approximately 250 tonnes of crude oil were spilled into the sea. The National Marine Oil Spill Contingency Plan was activated. Due to fact that the Georgian national oil pollution combating capacity was being exceeded, Georgia requested assistance from the Black Sea States and EMSA.

In total 12 ships (oil pollution response and ancillary ships) and one helicopter participated during the GEODELTA exercise. The participating fleet was made up of Georgian response ships, supporting vessels from the Black Sea coastal states and the EMSA contracted vessel *GSP Orion*.

This first exercise in Georgia, together with the supporting event ('open ship'), was an excellent way to promote EMSA pollution response services among the Black Sea states, local authorities, international organisations, media and the public. The exercise GEODELTA 2011 was successfully performed and the *GSP Orion* fulfilled the role assigned by the Georgian Authority in accordance with the exercise scenario.

EXERCISE CEX-11 AT-SEA EXERCISE UNDER THE COPENHAGEN AGREEMENT

On 28 September 2011, the at-sea marine pollution response exercise CEX-11 under the Copenhagen Agreement was held off Nynashamn, Sweden. The exercise was organised

by the Swedish Coast Guard in cooperation with the Finnish Environment Institute (SYKE).

The aim of the operational exercise CEX-11 was to practise emergency procedures, teamwork in cooperation with other nations and to test the response capability and the response time of the Contracting Parties. EMSA participated in the oil recovery operations with the icebreaker *Kontio*, contracted from Arctia Icebreaking at Sea, and based in Helsinki, Finland. Nine vessels from Sweden and Finland took also part in the at-sea exercise.

In conjunction with this operational exercise, on 27 September, a Notification (Alert) Exercise BOILEX 2011 involving EMSA and the Copenhagen Agreement Contracting Parties was held. Sweden requested mobilisation of EMSA contracted vessels via the MIC.

The exercise scenario simulated a collision between an oil tanker and a cargo vessel. The vessel *Goose Sleep Town* located in Gävle, north of Stockholm left the harbour on 26 September at 20:09h heading south on its journey to the port of Rotterdam in the Netherlands. On 26 September the oil tanker *Shu Shing Shi* crossed Bornholmsgattet on her way to Nynäshamn. The following day, she rounded the island Gotska Sandön and turned west. The vessels collided early in the morning of 27 September and oil (around 20,000 m^3 crude oil) started to leak.

The exercise was a success despite the challenge of coordinating a large number units in a relatively narrow exercise area. The EMSA contracted vessel *Kontio* fulfilled the role assigned to it by the Member State organising this exercise, Sweden, and also met the expectations of the Agency. The *Kontio* also participated in an unforeseen ship-to-ship transfer operation and this experience provides useful input to the ongoing project assessing the ship-to-ship transfer capabilities of the EMSA Network, in particular as regards the compatibility of the connectors, the use of grounding cables and the wearing of gas masks by the crew.

EMSA contracted ice breaker Kontio with deployed sweeping arm during the CEX-11 exercise.

JOINT ANTI-POLLUTION EXERCISE: THE NETHERLANDS, BELGIUM AND EMSA 2011 (NORTH SEA)

EMSA arranged a joint operational exercise in cooperation with the Netherlands, Belgium and the EMSA Contractor DC Industrial. The aim of the exercise was to strengthen the integration at the operational level of EMSA's contracted vessels with the Dutch and Belgian marine pollution response mechanisms. The exercise took place in the North Sea at Vlakte van de Raan on 3 October 2011. Two EMSA contracted vessels took part in the exercise: *DC Vlaanderen* and *Interballast 3*, together with several other vessels and Dutch and Belgian air surveillance aircraft. The exercise was coordinated by the Dutch On-scene Commander.

The exercise programme envisaged testing the U-formation of the boom towed by the Belgian tugs, followed by the *DC Vlaanderen*, *Interballast III* and a third DC Industrial vessel (contracted by the Rijkswaterstaat Nordzee) skimming oil with their sweeping arms. The oil slick was simulated by oil dispersant 'Radiagreen' spilled on the water surface (150 litres). The exercise programme was completed successfully. During the exercise, the EMSA contracted vessels *DC Vlaanderen* and *Interballast III* performed well and fulfilled the role assigned by the Netherlands, the Member State in charge for this exercise, and also met the expectations of the Agency.

EXERCISE NIRIIS 2011 (EASTERN MEDITERRANEAN)

On 6 October 2011 the pollution response exercise NIRIIS 2011, organised by the Cyprus Maritime Authority, was conducted off Limassol (Cyprus). Within the framework of the exercise an open-day event and a press conference, the 'Cyprus Maritime Conference 2011', also took place. The main purpose of this exercise was to train the Member State command and communication system and pollution response operations, the practical use of recovery equipment and the cooperation of participating units.

DC Vlaanderen with port sweeping arm following the oil collection boom during the joint exercise with The Netherlands and Belgium.

Alexandria following an open U-formation with sweeping arms deployed.

The exercise included the EMSA contracted vessel *Alexandria*, two support vessels, small crafts, one helicopter and an 'observer boat' for the press and other observers. The exercise scenario simulated the serious structural damage of a tanker en route from Suez to Cyprus carrying 20,000 tonnes of heavy fuel oil. According to the exercise program, the *Alexandria* was tasked to collect and recover the simulated oil spill with her on board oil recovery systems. This task was carried out in coordination with other participating units. In conjunction with this operational exercise, a notification exercise also took place: the assistance of the EMSA contracted oil recovery vessel through the EU cooperation mechanism (via the MIC) was requested by Cyprus.

The NIRIIS 2011 exercise was a positive experience for all the participants. The coordination between the different units was positively tested. The *Alexandria*'s performance during the first exercise within the EMSA Network met expectations.

EXERCISE RAMOGEPOL 2011

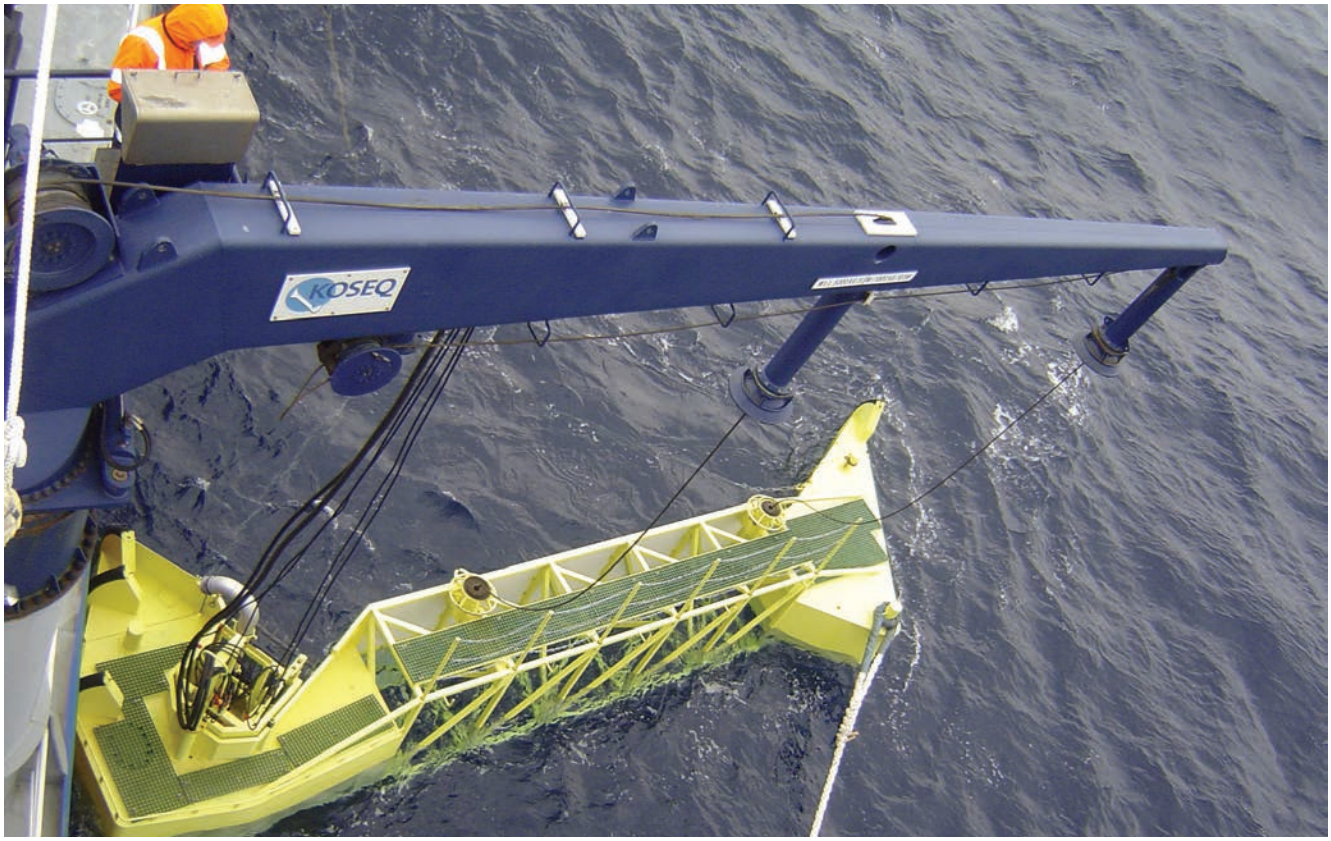
On 24 October 2011 the Agency participated in the international pollution response exercise RAMOGEPOL 2011, held off Genoa, Italy. This exercise was hosted and organised by the Italian authority, the General Directorate for the Nature and Sea Protection, within the framework of the RAMOGE agreement (France, Italy and Monaco). The scope of this exercise was to strengthen the operational cooperation with the countries party to the RAMOGE agreement[21].

According to the exercise scenario, the tanker *Sara* was on fire at the forward end of the vessel, while carrying Arabian heavy oil with 2.73% sulphur content.

During the exercise, Italy launched the relevant procedures and mechanisms for international assistance in the region. Accordingly, the Italian authorities implemented the RAMOGEPOL plan and requested assistance from EMSA contracted vessels through the MIC.

The EMSA vessel *Salina Bay* was instructed to deploy her sweeping arms following the tugboat *Bonassola*, lead vessel of the strike team located near the *Sara* (vessel in distress). Once in the exercise area, the vessels fitted with oil booms were unable to deploy their equipment due to the adverse weather conditions. Only the tugboat *Bonassola* was able to deploy her flexible sweeping arms.

21 Accord relatif à la protection de l'environnement marin et cotier d'une zone de la mer mediterranee (RAMOGE).



Salina Bay with the starboard sweeping arm deployed.

The *Salina Bay* performance during the exercise was up to the expected standards, especially taking into account the adverse weather conditions.

Exercise RAMOGEPOL 2011 was a fruitful experience for all the participants and a good opportunity to strengthen the cooperation between the parties to the RAMOGE agreement and the EMSA contracted vessel in this area, the *Salina Bay*.

JOINT SPAIN – EMSA EXERCISE 2011

This antipollution exercise organised by the Sociedad de Salvamento y Seguridad Maritima (SASEMAR) was performed on 16 November 2011 off Algeciras, Spain. The aim of the exercise was to coordinate joint resources from EMSA and SASEMAR to combat marine pollution.

The exercise scenario simulated the collision of a container vessel with an oil tanker carrying a cargo of around 85,000 tonnes of Intermediate Fuel Oil 180, in the area of Algeciras. Eighty tonnes were spilled into the water drifting towards the north coast of Algeciras Bay. Additionally, the continuous release of the cargo raised potential threat to the marine environment.

The vessel *Bahia Uno*, contracted from Mureloil, was mobilised in order to assist with the recovery of the oil. The vessel received instructions to deploy the starboard sweeping arm. The vessel deployed the sweeping arm, while the assisting vessel *Luz del Mar* alternated with *Bahia Uno* in leading the formation. In parallel, the SASEMAR oil spill response vessel *Miguel de Cervantes*, based in Algeciras, was on site and carrying out oil pollution response operations. The overall performance of the EMSA contracted vessel *Bahia Uno* was very good and the exercise was considered to be successful.

Financial overview: exercises

	COMMITMENTS	PAYMENTS
Exercises 2010 (carry-over of payments)	0.00	31,488.29
Exercises 2011	584,614.86	584,614.86
Sub-total 3.1.3	584,614.86	616,103.15

3.1.4 *Improvements to the Network Service*

3.1.4.1 Framework contracts for the supply of oil pollution response equipment

In April, EMSA launched an open call for tender in order to conclude five separate framework contracts for the purchase of oil pollution response equipment. The expected maximum expenditure for all five framework contracts in total is €15 million, excluding VAT. The oil pollution response equipment may be used for improvements of the at-sea oil recovery service provided by the Agency, which will be carried out taking into account identified technical operational needs as well as technical developments and innovations in the field of oil pollution preparedness and response. The five lots were as follows:

- Sweeping arm system;
- Off-shore high-capacity skimmer;
- Off-shore skimmer;
- Oil containment boom; and
- Combined oil containment and recovery system.

Framework contracts were successfully concluded for all lots for a duration of four years. Specific contracts for the supply of oil pollution response equipment may now be signed between EMSA and the contractors as and when deemed necessary.

3.1.4.2 Technical improvement projects

Two technical improvement projects were launched in 2011:

- *Aktea OSRV* for the Aegean Sea. A Normar 250TI high capacity skimmer will be added to the equipment available.
- Upgrade of the existing pollution response capacity of the pool of the three vessels contracted through James Fisher Everard for the Atlantic Coast. One set of 15 m rigid sweeping arms will be added to the contractor's stock pile arrangement in Cobh, Ireland.

3.1.5 *Public Sale*

In the context of the expiration of EMSA Service Contract 05-812-RES/09/05-LOT 1 (Baltic Sea) it was decided to organise a public sale for the two side collector sweeping arm systems covered by the Contract. EMSA has a call option on the equipment under the contract and a public sale was the most appropriate way to sell it in line with the applicable legal and financial rules. This was the first such occasion of a public sale by the Agency.

A contract notice was published in the Official Journal and a sales invitation and specifications were made available on the EMSA website. Interested buyers were provided with all the information necessary to submit an offer including the possibility of a stockpile visit. Following a successful outcome, the sales contract with the bidder that had made the highest offer was signed towards the end of the year. The actual handover of the (sold) equipment will take place during the first quarter of 2012.

Financial overview: equipment improvement 2011

	COMMITMENTS	PAYMENTS
Improvements made in 2010 to the pre-existing arrangements (carry-over of payments)	0.00	7,017.00
Improvements made in 2011 to the pre-existing arrangements	2,671,773.00	1,291,616.50
Sub-total 3.1.4	2,2671,773.00	1,298,633.50

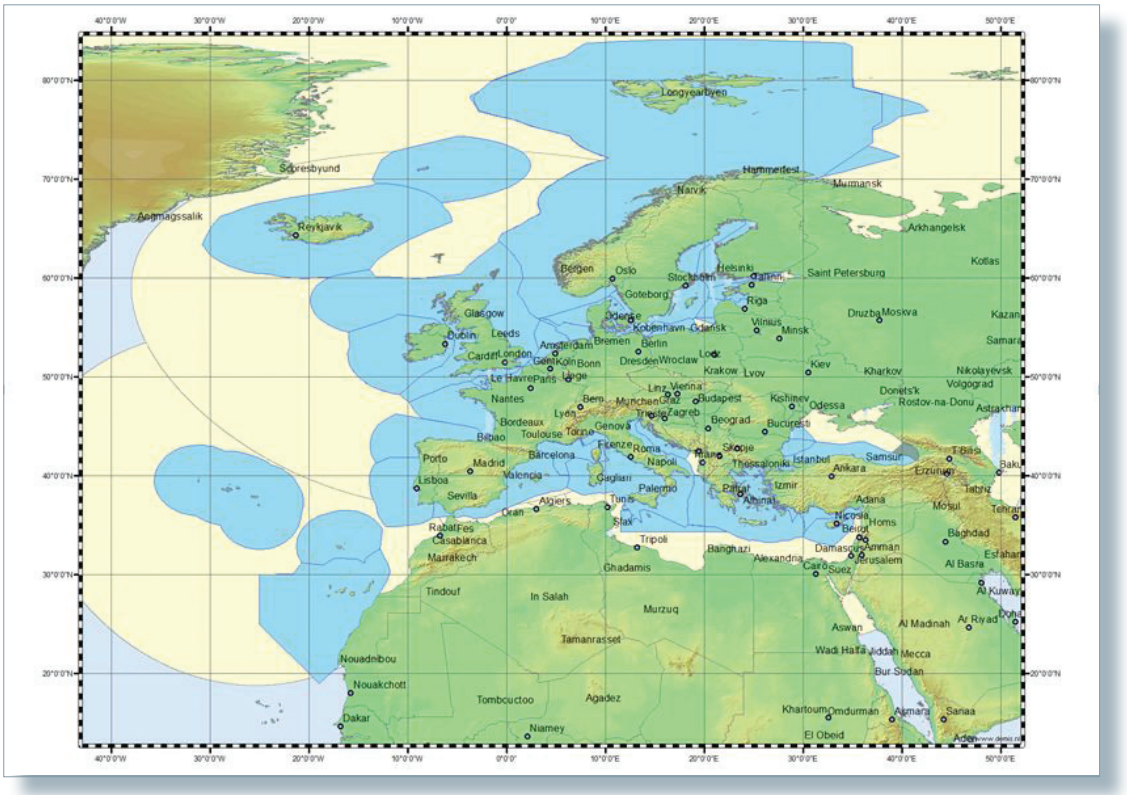
3.2 CLEANSEANET SATELLITE SERVICE FOR OIL SPILL MONITORING

3.2.1 *Introduction*

CleanSeaNet, the European pollution monitoring and vessel detection service, was launched in 2007. The service was set-up to support Member States' actions to combat deliberate or accidental pollution in the marine environment in the framework of 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" and in particular Article 10[22]. The service is based on the Near Real Time analysis of Synthetic Aperture Radar (SAR) satellite images for oil pollution and vessel detection.

Between 2007 and early 2011, the service was delivered by EMSA through a web user interface hosted by a contracted CleanSeaNet consortium. It was decided to setup an in-house CleanSeaNet Data Centre from 2011 in order to benefit from other European maritime applications available at the Agency.

22 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'.



Groundstation coverage and alert areas.

The in-house CleanSeaNet Data Centre started operations in December 2010 for planning, and the transfer of all services was completed on 1 February 2011. The acquisition and analysis of satellite images is now contracted to four European companies. As soon as the CleanSeaNet data centre receives the results of analyses, alerts are automatically generated and sent to authorities in the coastal States.

The fact that the analysed images and related information products are available in Near Real Time, i.e. shortly after the satellite passes overhead[23], remains the main feature of the service. The design of the CleanSeaNet data centre has introduced a number of new functionalities such as the capacity to acquire satellite images of up to 1400 km long. The alert report contains all the necessary information for coastal States to instigate follow-up (e.g. sending aerial surveillance to confirm possible spills reported).

In cases of accidental pollution, coastal States can request support from the service in the form of additional images and monitoring of major spills over time.

Since 2011, the service has been available to 26 coastal States which includes all European Union coastal States, Croatia, Turkey, Iceland, and Norway. In the framework of the MONINFO[24] project, services were also made available to Georgia. The map above shows the total area that the service is capable of covering (in yellow on the map) and the alert areas defined by the coastal States using the service (in blue on the map).

3.2.2 *The Operational Use of CleanSeaNet*

CleanSeaNet is the European satellite-based oil spill monitoring and vessel detection service. It uses satellite SAR images to undertake routine monitoring of all European waters looking for illegal discharges. The service detects spills and vessels possibly linked to spills and supports the identification of polluters by combining the CleanSeaNet with vessel traffic information available through SafeSeaNet. Upon receipt of CleanSeaNet images, coastal States can instigate follow-up actions, such as on-site verification (e.g. through sending aircraft) and requesting the inspection of suspected vessels in the next port of call. CleanSeaNet also provides emergency support in the case of accidental spills.

23 For satellite images covering 400 km by 400 km, the analysis is provided in maximum of 30 minutes. For images of different dimensions the time varies slightly.

24 The MONINFO project, 'Environmental Monitoring of the Black Sea Basin: Monitoring and Information Systems for Reducing Oil Pollution', administered by the Black Sea Commission was concluded at the end of 2011.

Satellite acquisitions for routine monitoring

With the deployment of the new CleanSeaNet Data Centre it has been possible to improve the planning process. Previously CleanSeaNet relied on standard images (400 km x 400 km) to provide Member States with their coverage requirements. The current approach involves the use of segments: with these CleanSeaNet can plan variable size images (segments) that can be adjusted in length to the requirements. This generates savings in cost of imagery (segments are usually cheaper), delivery times (one segment takes less time to process than multiple images) and usable area (less land and more sea area). This has an impact on the total number of images delivered by the service (one segment is the equivalent of multiple images) leading to an overall reduction. Statistics using the number of images (number of spills per image) will be adapted to reflect the new strategy and adjusted to area (number of spills per defined geographical area covered).

Year: 2011 (1 February - 31 December 2011)			
Satellite	Status	Nr of images	Delivery rate
ENVISAT	Ordered	1641	89%
	Delivered	1456	
RADARSAT-1	Ordered	175	74%
	Delivered	129	
RADARSAT-2	Ordered	589	89%
	Delivered	524	
TOTAL	Ordered	2405	88%
	Delivered	2109	

Delivery statistics are present in figures on the following page (breakdown per satellite and monthly evolution).

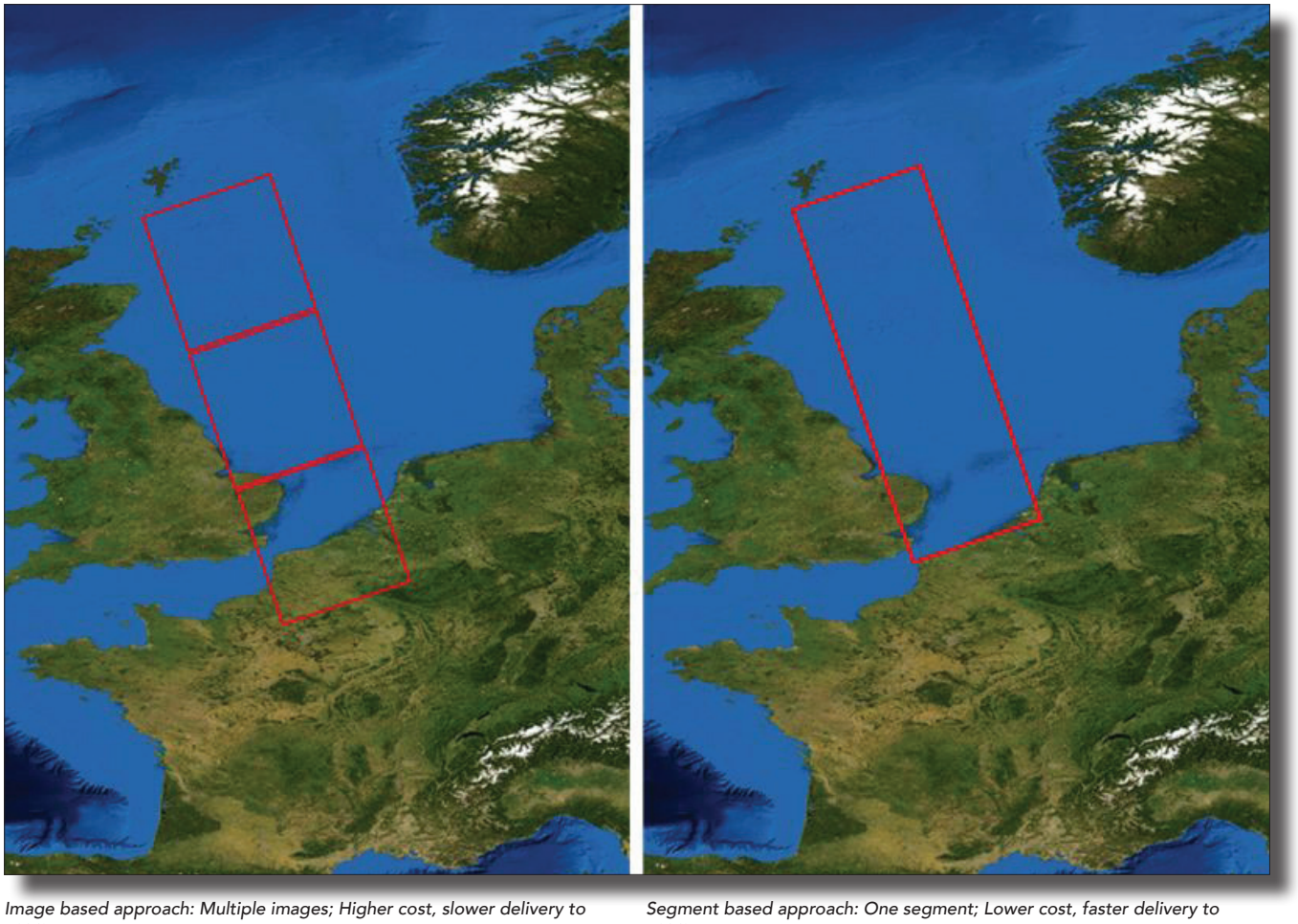
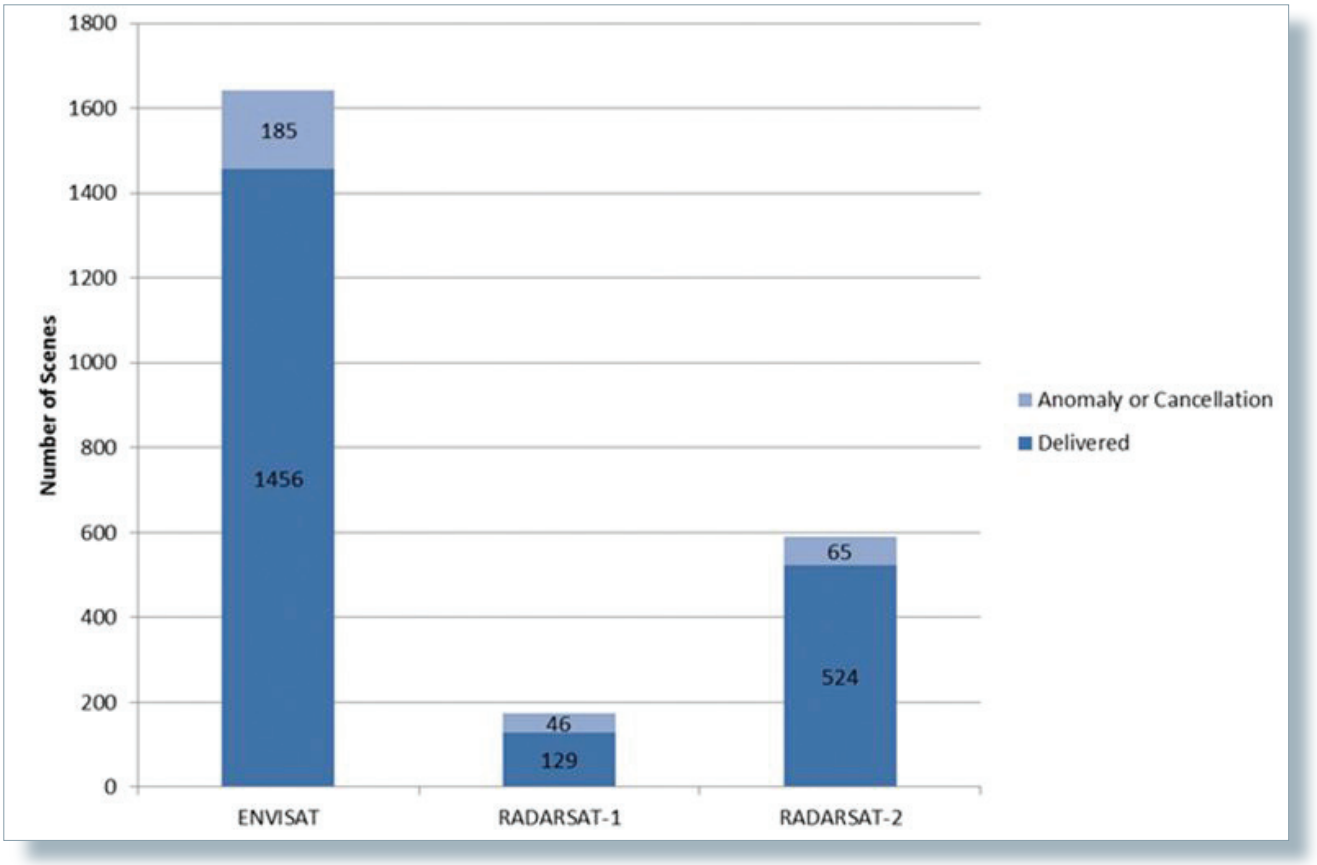
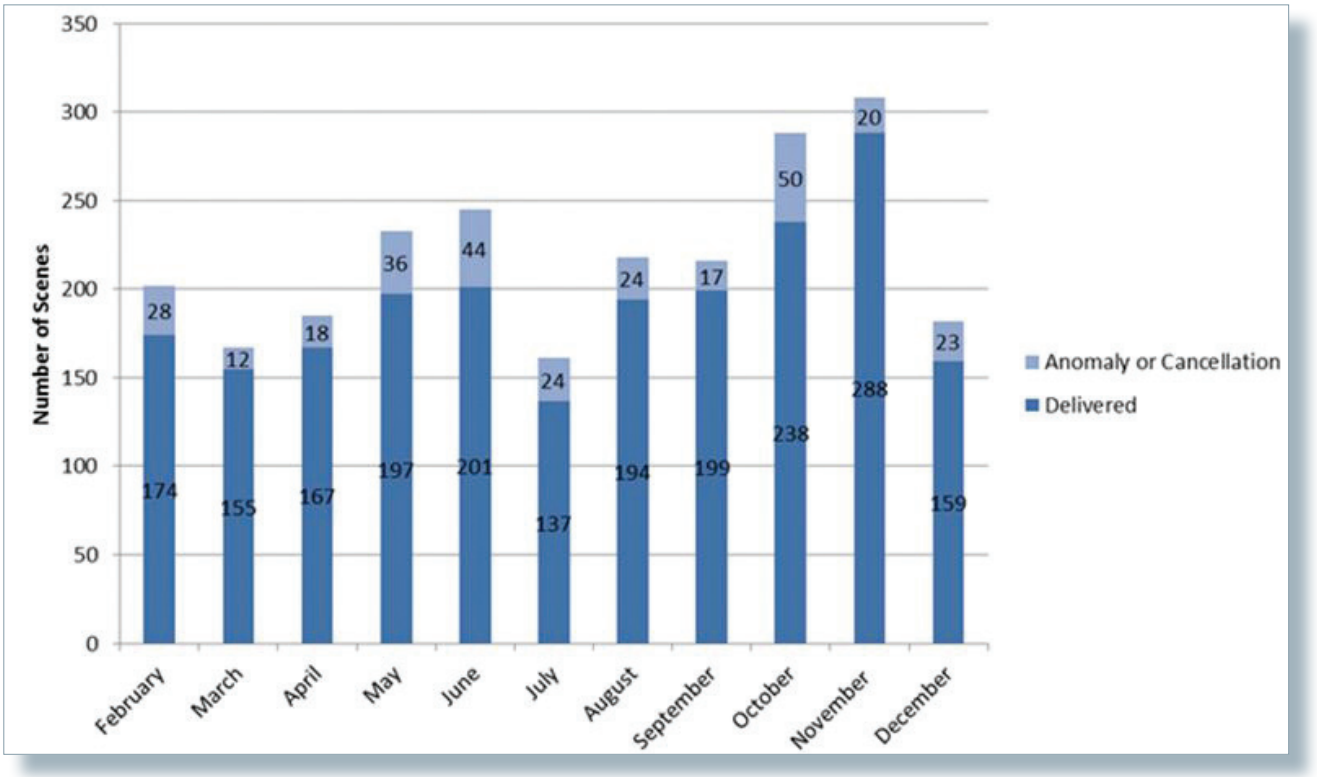


Image based approach: Multiple images; Higher cost, slower delivery to users.

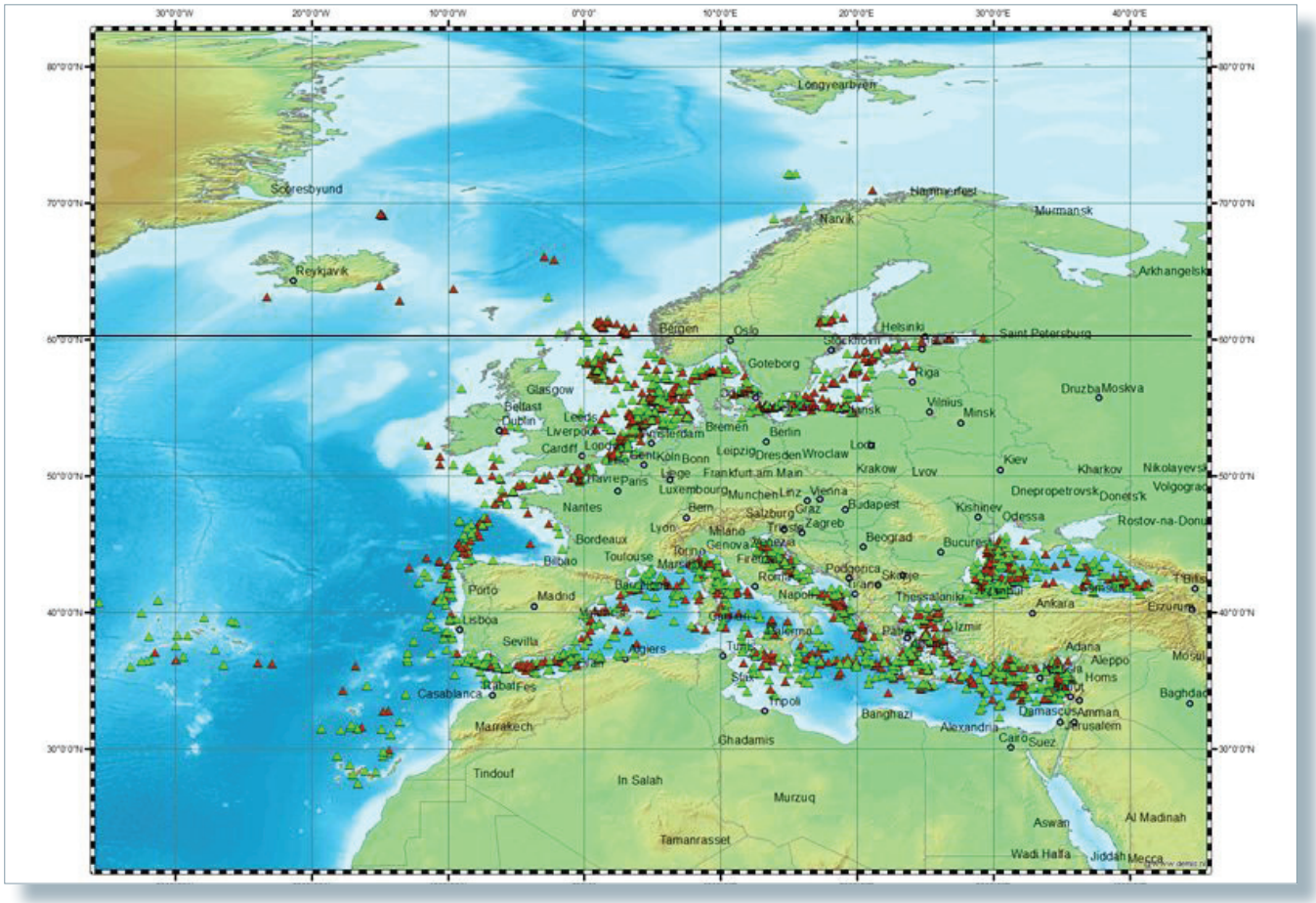
Segment based approach: One segment; Lower cost, faster delivery to users.



CleanSeaNet 2011: Number of ordered images per satellite.



CleanSeaNet 2011: Number of monthly ordered images.



CleanSeaNet detections from February until December 2011 (class A in red - class B in green)

CleanSeaNet images are able to capture very thin films of oil on the sea surface, some measuring just micrometres. Nevertheless, it is important to note that CleanSeaNet does not detect 'oil spills' but 'possible oil spills' because SAR satellite images cannot define the nature of a spill (e.g. mineral oil, fish or vegetable oil, or other look-alikes). However, improvements made to the CleanSeaNet service have reduced the level of 'mis-reporting'.

Since February 2011, spills reported by service providers have been separated into 2 classes:

- Class A - the detected spill is most probably oil (mineral or vegetable/fish oil) or a chemical product;
- Class B - the detected spill is less probably oil (mineral/vegetable/fish oil) or a chemical product.

On the 2,143 images delivered, a total of 2,048 possible oil spills were detected (749 Class A spills and 1,299 Class B spills). Since February, there have been 5.08 possible spills detected per million km² (1,000 km x 1,000 km) monitored.

CleanSeaNet Results, April 2007-January 2011

In 2011, EMSA published a report summarising operational results of the first generation of the CleanSeaNet service which covered the period between 16 April 2007 and 31 January 2011:

- 8,866 possible spills were detected and reported by CleanSeaNet;
- Image coverage density varied from 1-2 images per month in some areas to more than 20 images per month in others, based on coverage requirements defined by the coastal States;
- Over 1,000 million km² were monitored. To cover the same surface area with aerial surveillance would have required more than 50,000 flight hours;
- On average, the trend has been a global reduction in the number of possible spills detected in the images: from 1.38 possible spills identified per image in 2008 (10.77 per million km²) to 1.0 (7.61 per million km²) in 2009 and to 0.71 (5.68 per million km²) in 2010;

- 2,828 satellite detections were checked on site of which 745 were confirmed as mineral oil or other substance;
- 50% of spills checked by aircraft within 3 hours of satellite acquisition were confirmed[25];
- Of the confirmed spills, 80% were mineral oil and 20% were other substances;
- CleanSeaNet provided emergency support for 10 accidental spills.

CleanSeaNet service results in 2011 showed a continuation of the trends observed previously.

The role of CleanSeaNet in the law enforcement chain for combating illegal discharges

The CleanSeaNet service was designed to be integrated into national and regional pollution response chains. 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.

During the first three years of CleanSeaNet operations, although a large number of spills were detected on satellite images and reported, few legal actions were taken against or penalties imposed on polluters as a result. In order to discuss how the law enforcement chain might be improved, EMSA organised a workshop in Lisbon on 15-16 February 2011, entitled 'Enhancing the effectiveness of the law enforcement chain in combating illegal discharges'. The workshop brought together key stakeholders from operational authorities, vessel inspection authorities, and administrative and judicial enforcement authorities, to discuss the current status and likely future trends in the law enforcement chain for countering illegal discharges.

During 2011, interested participants from the Regional Agreements, international organisations (such as Interpol, the North Sea Network of Prosecutors and ENPRO), and representatives of Member State administrations, were invited to volunteer to take part in the Working Group for the drafting of European Guidelines. Participants for the Working Group were identified, and the kick-off meeting took place in EMSA on 15 December 2011. During the meeting, Terms of Reference were agreed, and the likely structure and content of the Guidelines was discussed.

Another event related to improving the detection and prosecution of illegal discharges was the Aerial Surveillance Training organised through the CTG-MPPR, which is explained in more detail in section 4.2. This event is closely related to the activities of CleanSeaNet. Once images have been provided by the CleanSeaNet service, it is critical that detections are verified without delay. This is done most effectively by aircraft, which also provide the best vantage point (in comparison to verification from other vessels) for assessing the extent and nature of the spill.

Support to Aerial Surveillance operations

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 Airborne Radar (SLAR), ultraviolet and infrared sensors. CleanSeaNet service supports these operations with the provision of supplementary satellite images.

During 2011, one CEPCO operation took place in the Baltic. The HELCOM Super-CEPCO operation, 29 August to 4 September, was organised by the Finnish authorities with the cooperation of the Swedish coast guard. Five countries participated: Estonia, Finland, Sweden, Germany and The Netherlands. EMSA provided 11 satellite images during the 7 day period of the operation. Four oil spills were detected (three Class A and one Class B).

Financial overview: satellite image licenses and processing

	COMMITMENTS	PAYMENTS
Satellite image licences	876,615.32	771,441.00
Satellite image processing (V1)	0.00	317,638.38
Satellite image processing (V2)	500,000.00	1,626,399.61
Sub-total 3.2.2	1,376,615.32	2,175,478.99

25 Information on the time interval between satellite acquisition and on-site verification of possible spills is only available from January 2009.

3.2.3 *Support to CleanSeaNet Users*

The CleanSeaNet User Group

In order to ensure that CleanSeaNet meets the operational needs of the users, EMSA has set up the CleanSeaNet User Group which, twice a year, gathers representatives from the participating States operationally involved in oil pollution monitoring and surveillance.

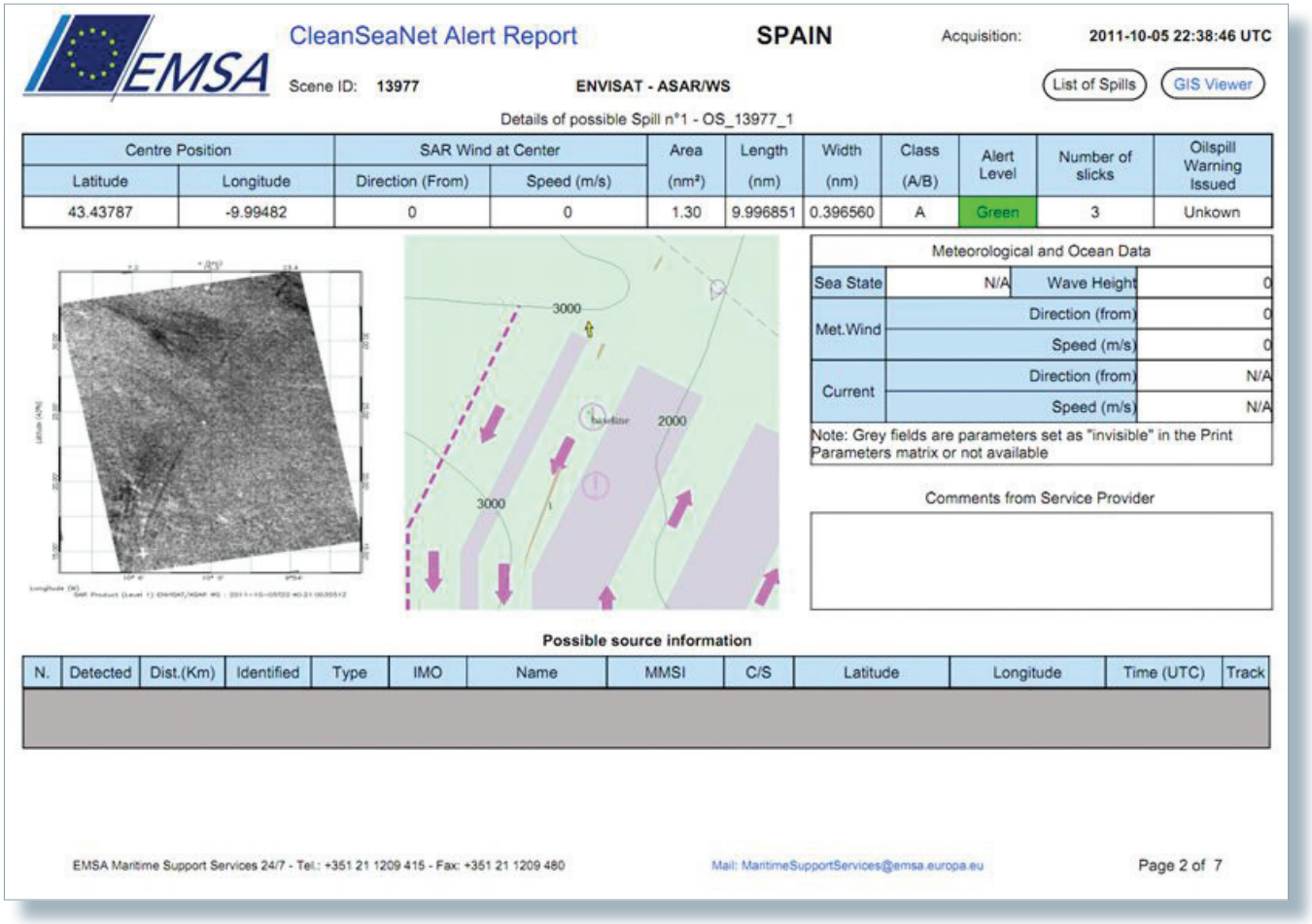
In 2011, the CleanSeaNet User Group met twice (16 June and 6 December). The main objective of these two meetings was the definition of priority actions to improve the level of service. The new alert report, as it is now delivered by the CleanSeaNet data centre in case a possible spill is detected, is a good example of improvements introduced based on successful cooperation between the Agency and the users.

Coastal States Training

In October 2011 CleanSeaNet users attended training at EMSA on the use of CleanSeaNet. A total of 53 participants from 26 countries attended the training, as well as two EMSA Maritime Support Service Duty Officers. The training consisted of practical sessions on the computer.

Financial overview: CSN user meetings, training and workshops

	COMMITMENTS	PAYMENTS
CleanSeaNet User Group meetings	35,916.05	27,812.01
CleanSeaNet User trainings and workshops	51,950.00	98,403.71
Sub-total 3.2.3	87,866.05	126,215.72



CleanSeaNet Alert Report — SPAIN — Acquisition: 2011-10-05 22:38:46 UTC

Scene ID: 13977 — ENVISAT - ASAR/WS — List of Spills — GIS Viewer

Details of possible Spill n°1 - OS_13977_1

Centre Position		SAR Wind at Center		Area	Length	Width	Class	Alert Level	Number of slicks	Oilspill Warning Issued
Latitude	Longitude	Direction (From)	Speed (m/s)	(nm²)	(nm)	(nm)	(A/B)			
43.43787	-9.99482	0	0	1.30	9.996851	0.396560	A	Green	3	Unkown

Meteorological and Ocean Data

Sea State	N/A	Wave Height	0
Met.Wind		Direction (from)	0
		Speed (m/s)	0
Current		Direction (from)	N/A
		Speed (m/s)	N/A

Note: Grey fields are parameters set as "invisible" in the Print Parameters matrix or not available

Comments from Service Provider

Possible source information

N.	Detected	Dist.(Km)	Identified	Type	IMO	Name	MMSI	C/S	Latitude	Longitude	Time (UTC)	Track

EMSA Maritime Support Services 24/7 - Tel.: +351 21 1209 415 - Fax: +351 21 1209 480 — Mail: MaritimeSupportServices@emsa.europa.eu — Page 2 of 7

Alert report example - spill details.

3.2.4 *Cooperation with External Organisations*

Global Monitoring for Environment and Security (GMES) data provision was extended in 2011, enabling EMSA to access a wide range of satellite resources, optical and radar, during emergency situations.

Cooperation with the European Space Agency (ESA) is important and will continue. EMSA will be one of the final users of a new generation planning and ordering tool which is under development by ESA. In addition, and based on this cooperation, EMSA has access to wide range of (satellite) missions contracted by ESA for CleanSeaNet as a way of testing new satellite capabilities.

EMSA has been working with the Institute for Protection and Security of the Citizen (IPSC) of the Joint Research Centre (JRC) on a project to support automatic oil spill and vessel detection. In 2011 the project was finalised. As a result of the project, the Agency now has an automatic oil spill detection chain in place, a number of auxiliary layers (risk and SAR detection capability) ready to be used in the CleanSeaNet system, and an automatic vessel detection chain. The vessel detection chain is based on a software tool developed by JRC called SUMO that has been improved and adapted according to the Agency's needs.

The Agency has provided, on project-by-project basis, CleanSeaNet services to some third countries. EMSA participated in the project 'Environmental Monitoring of the Black Sea basin: Monitoring and Information Systems for Reducing Oil Pollution (MONINFO)' between 2009 and the end of 2011. The Permanent Secretariat to the Commission on the Protection of Black Sea against Pollution managed MONINFO with the aim of developing a monitoring and information system for reducing oil pollution in the Black Sea. The project was financed by the European Commission through a DG Environment grant. EMSA was requested to assist with the implementation of the project and Georgia and Turkey were granted limited access to CleanSeaNet. Turkey has now become a full CleanSeaNet user, and services were delivered to Georgia for the duration of the project.

Financial overview: CSN operation

	COMMITMENTS	PAYMENTS
CSN V1 - maintenance and running costs	0.00	16,667.00
CSN V2 - maintenance and running costs	141,939.34	141,939.34
CSN V1 improvements	0.00	0.00
CSN DC improvements	25,625.00	25,625.00
External programs, projects	85,387.00	225,387.00
CSN 2nd Generation: "CSN Data Centre" set-up	0.00	210,000.00
CSN 2nd Generation: "CSN services" set-up	0.00	74,187.65
Sub-total 3.2.4 and 3.2.5	252,951.34	693,805.99

3.3 SUPPORT TO COASTAL STATES AND THE COMMISSION FOR ACCIDENTAL SPILLS

3.3.1 *EMSA´s Oil Recovery Services support for accidental spills and emergencies*

Pollution from Gibraltar shore facility

A slops storage tank exploded at the port of Gibraltar at 13.37 UTC on 31 May 2011. Fire at the depot continued into the night and more explosions occurred. Once the fire was controlled it was found that oily product (100 to 400 tonnes) from the tanks had leaked into the sea. The pollution impacted the Spanish coastline and shore cleaning operations started the following day, on 1 June.

Spanish authorities decided to secure offshore oil recovery capacity for possible pollution response at sea. For this purpose, SASEMAR requested assistance from the closest of the EMSA contracted oil recovery vessels on 2 June. On request, channelled through the MIC via CECIS, EMSA mobilised the vessel *Bahia Uno* and the Incident Response Contract (IRC) was signed between the Spanish authorities and the ship owner, Mureloil.

The vessel was mobilised and ready to operate in less than eight hours from the signature of the Incident Response Contract. Two EMSA experts were deployed to Algeciras (Spain) and ready to board the *Bahia Uno* at the time the contract was signed.

Explosion of slops storage tank at the port of Gibraltar (© unknown)

The following day, 3 June at 10:00 UTC, after further evaluation of the situation, the Spanish authorities decided to de-mobilise the *Bahia Uno* and an 'End of Service' notice was sent to Mureloil.

In addition to *Bahia Uno* assistance, CleanSeaNet provided the Spanish authorities with an additional SAR satellite image of the area of the incident, delivered through the CleanSeaNet Data Centre.

3.3.2 CleanSeaNet support for accidental spills and emergencies

Godafoss, Norway

The container ship *Godafoss* ran aground near Bolingshawn in the Hvaler archipelago, Oslo Fjord, southern Norway on the evening of 17 February 2011. As a result, its hull was breached and an unspecified, but significant, proportion of the 800 tonnes of heavy oil on board leaked from the grounded box ship. The Norwegian authorities contacted EMSA via the European Commission's Monitoring and Information Centre (MIC) with a request to supply CleanSeaNet satellite images of the area. The GEST[26] mechanism was activated and four images were provided over the area of interest (three high resolution radar and one high resolution optical image).

MV Oliva, Tristan da Cunha, UK

On the 16 March 2011 the bulk carrier *Oliva* ran aground on Nightingale Island, Tristan da Cunha, in the middle of the South Atlantic Ocean, capsized and was partially sunk. The Administration of Tristan da Cunha reported oil from the stricken bulker around most of the island. The slick ranged from thin films of oil, small balls and larger clumps of tar. Oiled penguins were reported on nearby Inaccessible Island. The owners have chartered two vessels to assist in the clean-up operations. CleanSeaNet provided 6 ENVISAT images over the target area to support the clean-up and response operations.

26 GEST is the GMES Emergency Satellite Tasking mechanism. Through GEST, EMSA has access to a wide range of satellite missions that can be used in case of oil spill related emergencies.

Gannet F Platform spill, UK

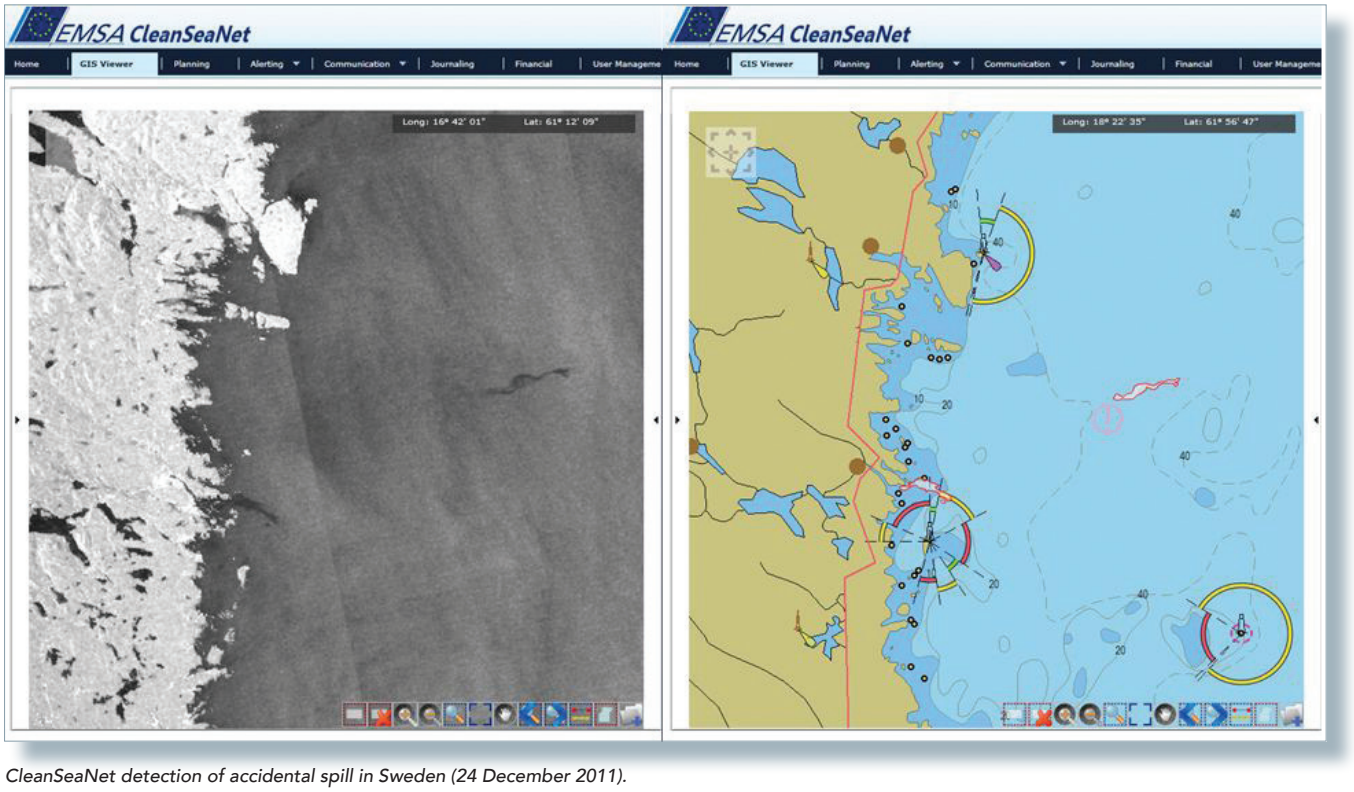
An accident occurred on the 10 August 2011 in the *Gannet F platform*, operated by Shell, approximately 176 km east of Aberdeen. The accident caused 200 metric tonnes of oil to be spilled. In the following days, efforts were made to control the leak but were not successful. On the 16 August 2011 the UK's Maritime and Coastguard Agency (MCA) made a request to the MIC for emergency satellite support from EMSA, which activated the GEST mechanism. The monitoring entailed daily coverage of the accident area and included nine high resolution radar images and eight high resolution optical images for the area of interest, with the first image being delivered on the same day of the request. Reports with analysis of all the delivered images were sent to the MCA on a daily basis. On 21 August 2011 Shell reported that they had contained the leak and the monitoring was officially closed on the 24 August 2011.

Reina 1, Italy

On the 20 of October 2011 the general cargo ship *Reina 1* collided with the passenger/ro-ro ferry *Ankara* and sank in international waters in the southern Adriatic Sea around 80 km north of Brindisi, southern Italy. There were no injuries reported on board the ferry but three crew members of the *Reina 1* lost their lives in the accident. Italy requested CleanSeaNet images of the area around the sunken ship and three Radarsat images were provided over the interest area. No pollution related with the accident was detected.

Land-Based Tanker, Sweden

A land-based tanker overturned at a location north of Vallvik, south-eastern Sweden, on 21 December, and as a result an estimated 800 tonnes of the 8,000 tonnes of pine wood oil on board spilled into the sea. The EMSA CleanSeaNet system was first activated by Sweden on 22 December with five images ordered to support clean-up operations. With the expansion of the oil slick and consequent drift to Finnish waters, CleanSeaNet was activated by Finland on the morning of 25 December. An additional four CleanSeaNet images were ordered to monitor the situation. Due to severe weather conditions clean-up operations were then halted. The spill eventually broke up into smaller patches on 30 December.



CleanSeaNet detection of accidental spill in Sweden (24 December 2011).

4. COOPERATION AND COORDINATION

4.1 INTRODUCTION

The work of the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR) continued in 2011 as detailed below. EMSA also continued its cooperation with the pollution response experts of EU/EFTA Member States, EU Candidate Countries, the Regional Agreements (Bonn Agreement, HELCOM, REMPEC, Black Sea Commission and Lisbon Agreement) and, on behalf of the Commission, with the International Maritime Organisation (IMO) and the Emergency Preparedness and Response Working Group (EPPR) of the Arctic Council.

4.2 CONSULTATIVE TECHNICAL GROUP FOR MARINE POLLUTION PREPAREDNESS AND RESPONSE

In 2007, EMSA established the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR), which is composed of marine pollution response experts from all 27 Member States, EU Candidate Countries (Turkey, Croatia and Montenegro), EFTA Coastal States (Iceland[27] and Norway), the Regional Agreements' Secretariats and the European Commission represented by DG ECHO.

The CTG MPPR provides an EU level platform for Member States to contribute to the improvement of preparedness and response to accidental and deliberate pollution from ships. This 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.

The status of ongoing priority actions and planned activities agreed for 2010-2011 was reviewed at the 6th meeting of the Group in October 2011, and new projects were included in the CTG MPPR Rolling Work Programme for 2011-2012 after a comprehensive assessment. A summary of the status of the main ongoing and planned activities of the CTG MPPR for 2011-2012 is provided below.

Claims management and cost recovery: EU States Claims Management Guidelines

The EU States Claims Management Guidelines were completed in 2010. Subsequently these guidelines were published on the EMSA website, and relevant industry associations (IOPC Fund, ITOPF) were invited to provide feedback. Comments were received and the CTG MPPR was invited to consider the way forward. As an important step to further develop the Guidelines, the CTG MPPR participants provided their comments on the use of the Guidelines. The observations were positive and the CTG MPPR agreed on the Terms of Reference for the Claims Management Working Group to develop a Version 2 of the Guidelines to be presented at the next CTG MPPR meeting in October 2012.

Training Workshop on Surveillance

The proposal to organise a training workshop on aerial and satellite based surveillance was first discussed at the 4th CTG MPPR meeting and became a subject of the Rolling Work Programme. Subsequently a course outline was developed by a correspondence group coordinated by EMSA. Discussions of the proposed course during the 5th CTG MPPR meeting resulted in the decision to start with a training workshop specifically for the crews of surveillance aircraft with little to medium experience, to take place in 2011. The workshop, 'The use of aerial surveillance for marine pollution detection – operational aspects', was held at EMSA from 21-23 December 2011, and was attended by 42 delegates from 21 countries.

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 practices between the Member States and to enhance contacts, networking and cooperation between Member States in the field of marine pollution with a view to improving 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.

27 Iceland is also an EU Candidate Country

Following the revision of the EMPOLLEX Guidelines in 2010, the program saw an increase in popularity and 13 exchanges of experts were successfully completed in 2011.

4.3 COOPERATION WITH REGIONAL AGREEMENTS AND THE 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.

Meeting of the Working Group on Emergency Prevention, Preparedness and Response

The effects of the melting ice and milder temperatures in the Arctic region are causing serious environmental concerns, but are also creating opportunities for economic development. These include new routes for maritime transport and the exploration/exploitation of fossil fuel deposits and other natural resources. The European Union outlined its interest in the Arctic region in the *European Parliament resolution of 20 January 2011 on a sustainable EU policy for the High North (2009/2214(INI))*. DG MARE is currently acting as a cross-sectoral coordinator within the Commission.

The Emergency Prevention, Preparedness and Response (EPPR) Working Group was established under the Arctic Environmental Protection Strategy (AEPS) in 1991. The EPPR Working Group is one of five working groups of the Arctic Council and meets annually. EPPR was recently given two new tasks: 1) to develop an 'Instrument on Arctic Marine Oil Pollution Preparedness and Response, and 2) to develop 'recommendations and/or best practices in the prevention of marine pollution'. The development of the Instrument and the Recommendations was requested by the Ministries of the Arctic Council, with deadlines of 2013. EMSA participated exceptionally in this meeting on behalf of DG MARE and reported back to the Commission on the outcome of the meeting.

Participants in the meeting of the Secretariats of the Regional Agreements and the European Commission.

Meeting of the Regional Agreements

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 European Union 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.

Meeting of the Secretariats of the Regional Agreements

The informal meetings of the Secretariats of the various Regional Agreements and the European Commission are held annually. This year's meeting was hosted by the Barcelona Convention/REMPEC in Malta in March 2011. EMSA provided the secretariat for the meeting preparation and the meeting minutes.

4.4 FINANCIAL OVERVIEW: COOPERATION AND COORDINATION

	COMMITMENTS	PAYMENTS
2011 CTG Meeting and CTG workshops	110,831.87	82,817.16
EMPOLLEX	30,000.00	14,115.40
Activities in the field of dispersants	0.00	0.00
IMO / Regional Agreements	6000.00	0.00
Sub-total for Cooperation & Coordination	146,831.87	96,932.56

5. INFORMATION

5.1 INTRODUCTION

The Agency continued collecting and disseminating information in the field of marine pollution preparedness and response in support of EU and EFTA Member States, EU Candidate countries and the Commission. The Agency's information service for chemical emergencies was evaluated following its first two years of operation. The positive outcome of the evaluation resulted in an extension of the service. MAR-ICE will continue providing, upon request, information on chemical spills at sea until the end of 2014.

Two tendered projects on 1) chemical response datasheets, which will further strengthen MAR-ICE, and 2) vessel design criteria to respond to HNS incidents were successfully completed this year.

In addition and in line with Regulation (EC) No 2038/2006, EMSA prepared an expanded and updated Inventory of Member States anti-pollution vessels.

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, EMSA prepared a comprehensive contribution, which was submitted as requested to the Commission in October 2010. This report formed the foundation for the Mid-term Report that was submitted to the European Parliament and the Council by the Commission.

This report on the wide range of activities in the field of marine pollution preparedness and response for the period 2007-2009 was published by EMSA in 2011. It included analyses 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, information on oil transport patterns around Europe, an important consideration for the distribution of EMSA's Stand-by Oil Spill Response Vessels, was updated.

The report also included feedback provided by Member States and their marine pollution experts, as well as associations of relevant industries and NGOs, on the activities undertaken by the Agency.

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

5.3.1 MAR–ICE Network[28]: Information Service for Chemical Emergencies

One of the priority requirements when dealing with an HNS pollution incident is the identification of hazards and an assessment of the risks posed by a stricken vessel and its cargo to the public and to responders' safety, to the environment, and to the socioeconomic assets that a state or coastal community depend upon. The primary factors which determine the safety, environmental and socioeconomic impacts of the released HNS material(s) relate to the chemical and physical properties of the material spilled and its physical fate in the environment.

A priority activity for the Agency was the establishment of a network of experts, who can support and advise the Member States during the response to a chemical spill, as outlined in EMSA's HNS Action Plan in 2007. Based on a careful 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 MAR-ICE network (MARine Intervention in Chemical Emergencies) became operational in January 2009.

Following the first two years of operation, an evaluation of the service was conducted by EMSA in 2011. MAR-ICE has been activated nine times since its establishment in 2009. This includes five real incidents and four drills. The positive response from users of the service as well as high marks provided by Member States during the consultation in 2010 for the MAF Mid-term Report have led to the extension of MAR-ICE until the end of 2014. In addition to EU Member States and Norway, all EU Candidate countries can now also benefit from the MAR-ICE service.

The MAR-ICE service will continue to provide rapid information transfer regarding chemical substances involved in marine pollution emergencies, and thus address a common gap in this field identified across the EU.

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

The tender to contract a study for the development of vessel design requirements to enter and operate in hazardous environments, the Safe Platform Study, initially launched in 2010, has been completed. The results of the study were presented at the 6th CTG MPPR meeting and can be downloaded from EMSA's website. The focus of the study was the utilisation of existing vessels that can be adapted and re-fitted in order to enable their utilisation in HNS incident response operations. It identifies and describes the modifications necessary to enable the vessel to enter/approach the HNS incident area and perform various operational tasks. This was based on the different types of HNS response operations and the associated risks. The study has gathered relevant information that will ease the investment optimisation, contributing to a wider coverage of HNS response means.

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

Information on the short term fate and behaviour of chemical substances once released into the sea, is fundamental for a timely decision on the appropriate response options to the spill. This includes an evaluation of the risks for the health and safety of the responders, the public and potential adverse effects for the environment. Information on the behaviour of chemical substances in sea water is very limited and is an internationally recognised 'knowledge gap' in this field.

EMSA launched a tender in July 2010 aiming at the development of datasheets for commonly shipped chemical substances. These datasheets provide substance specific concise and relevant information for chemical spill response at sea, which can be used by the responders (national marine pollution response authorities) as a first source of information following the release of a chemical substance in the marine environment, or the threat thereof. The datasheets combine information from different sources such as MSDS[29], GESAMP[30], IMDG[31], IBC[32], and REACh dossiers.

28 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.

29 MSDS: Material Safety Data Sheets.

30 GESAMP: Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection.

31 IMDG: International Maritime Dangerous Goods code.

32 IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk.

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

Following the completion the procurement procedure of a 4-year Framework Contract in December 2010, the first Service Contract was signed in early 2011. The development of the Graphic User Interface and the preparation of the first set of the MAR-CIS (MARine Chemical Information Sheets) datasheets were completed as scheduled in December 2011. The information in these datasheets for chemical substances will be made available primarily through EMSA's MAR-ICE Network to the EU/EFTA Member States' and EU Candidate Countries marine pollution response authorities.

5.4 INVENTORIES OF MEMBER STATES POLICIES AND OPERATIONAL RESPONSE CAPACITIES

The Agency is tasked by Regulation (EC) No 2038/2006 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". 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 also include contact information of the competent national authorities, the policies, and the preparatory arrangements of each Member State. In 2011, EMSA updated its *Inventory of Member States Oil Pollution Response Vessels*. The revised inventory now includes substantially more detailed information and geo-referenced maps of Member State response vessels as well as EU-wide summary maps.

5.5 INFORMATION DISSEMINATION

The pollution preparedness and response section of the Agency website was further developed and updated regularly with relevant documents and links to assist experts and public alike.

EMSA produced a new video, highlighting the added value and cost efficiency of its Network of Stand-by Oil Spill Response Vessels, based on the results of an analysis of actual and hypothetical large oil spills. This, and other EMSA videos, can be viewed on EMSA's website.

The Agency continues to support INTERSPILL, the major marine pollution conference in Europe, as a member of the event's Steering Committee[33], recognising the importance of sharing spill response experience and disseminating best practices. EMSA continues its active role in the Committee meetings with the aim of ensuring EU and EFTA Member States' interests are represented at an appropriate level and taken into consideration during preparations for the next conference in London in March 2012.

5.6 FINANCIAL OVERVIEW: INFORMATION

	COMMITMENTS	PAYMENTS
Information dissemination	227,078.34	244,642.70
Sub-total for Information	227,078.34	244,642.70

33 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[34] FOR POLLUTION PREPAREDNESS AND RESPONSE ACTIVITIES

	COMMITMENTS	PAYMENTS
Network of Stand-by Oil Spill Response Vessels	17,051,255.58	11,753,778.87
Contracts 2005 (Baltic Sea, Atlantic and Channel, Mediterranean Sea)	0.00	985,589.90
Contracts 2006 (Atlantic Coast, Mediterranean East)	0.00	825,000.00
Contracts 2007 (Aegean Sea, Atlantic Coast, Mediterranean West)	0.00	2,190,367.00
Contracts 2008 (Black Sea, North Sea, Bay of Biscay)	0.00	1,287,158.50
Contracts 2009 (North Baltic, Atlantic/Channel)	0.00	1,189,143.64
Contract 2010 (Mediterranean East)	0.00	489,716.27
Contracts 2011 (Southern Baltic, Mediterranean Central, Mediterranean West and Black Sea)	13,465,633.89	4,750,702.91
Renewal Contracts 2008	3,557,856.00	0.00
Associated activities (Tender Clarification Meetings, rating reports, experts, PAMS)	27,765.69	36,100.65
Maintaining the Service: Drills and Exercises	584,614.86	616,103.15
Exercises 2010	0.00	31,488.29
Exercises 2011	584,614.86	584,614.86
Improvements to the Network Service	2,2671,773.00	1,298,633.50
Improvements 2010 to the existing arrangements	0.00	7,017.00
Improvements 2011 to the existing arrangements	2,671,773.00	1,291,616.50
CleanSeaNet Service Implementation and Use	1,376,615.32	2,175,478.99
Satellite image licences	876,615.32	771,441.00
Satellite image processing (V1)	0.00	317,638.38
Satellite image processing (V2)	500,000.00	1,626,399.61
Support to CleanSeaNet Users	87,866.05	126,215.72
CSN User Group meetings	35,916.05	27,812.01
CSN User trainings and Workshops	51,950.00	98,403.71
CleanSeaNet Service Developments	252,951.34	693,805.99
CSN V1 - maintenance and running costs	0.00	16,667.00
CSN V2 - maintenance and running costs	141,939.34	141,939.34
CSN V1 improvements	0.00	0.00
CSN DC improvements	25,625.00	25,625.00
External programs, projects	85,387.00	225,387.00
CSN 2nd Generation: "CleanSeaNet Data Centre" set-up	0.00	210,000.00
CSN 2nd Generation: "CleanSeaNet services" set-up	0.00	74,187.65
Cooperation and Coordination	146,831.87	96,932.56
2009 CTG Meeting	110,831.87	82,817.16
EMPOLLEX	30,000.00	14,115.40
Activities in the field of dispersants	0.00	0.00
IMO / Regional Agreements	6000.00	0.00
Information	227,078.34	244,642.70
Information dissemination	227,078.34	244,642.70
Related missions of EMSA Staff	144,510.00	109,734.21
TOTAL allocated	23,000,000.00	20,000,000.00
TOTAL utilised	22,543,496.36	17,655,325.69

34 The figures in this report are based on preliminary figures available for 2011. 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

EUROPEAN MARITIME SAFETY AGENCY