

Network of Stand-by Oil Spill Response Vessels: Drills and Exercises

Annual Report 2012

Unit C.1: Pollution Preparedness and Response

January 2013

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AKTEA OSRV exercising at sea

EXECUTIVE SUMMARY

General

- In order to provide additional support to the Member States' pollution response mechanisms in a cost efficient way, the European Maritime Safety Agency (EMSA) has built up, in European waters, a network of contracted Stand-by Oil Spill Response Vessels. The vessels are ready to respond to oil spills at sea following the request of a coastal State¹ or the European Commission. By the end of 2012, the Network comprised of 17 fully equipped vessels ready for immediate mobilisation, as well as one back-up vessel.
- 2. To achieve the performance for pollution response required by the Vessel Availability Contract (VAC), contractors together with the associated vessels and their crews participate regularly in training, drills and operational exercises. The VAC defines two types of drills: 1) Acceptance Drill and 2) Quarterly Oil Pollution Response Drill, and two types of exercises: 1) Operational Exercises and 2) Notification Exercises. Carrying out drills and exercises is an obligation for the contractor.
- 3. The number of drills and exercises carried out annually has increased significantly over the years in line with the development of the Network. The situation for 2012 is shown in the following table:

¹ EU Member States, EU Candidate States, Norway and Iceland.

Summary of Drills and Exercises carried out in 2012

Acceptance Drills: Newly Contracted Vessels	Acceptance Drills: Replacement of Existing Vessels	Acceptance Drills: Improvement projects/New equipment	Quarterly Drills	Operational Exercises	Notification Exercises
2	2	4	57	12	13

- 4. In 2012, EMSA staff attended drills and exercises in line with the "Drill Attendance Guidelines"² introduced in 2009. After three years of implementation i.e. in 2013, the guidelines should be reviewed to ensure that the coverage of quarterly drills and exercises is still appropriate.
- 5. The performance of the vessels, crews and response coordinators is the main criterion for the evaluation of contract implementation. Evaluation of the acceptance drills, quarterly drills and exercises by the Agency's staff in line with pre-established guidelines is an effective method to ensure that the level of response preparedness of the Network is adequately maintained.

Outcome of Drills and Exercises in 2012

- 1. The overall outcome of the drills and exercises carried out during 2012 demonstrated that the service is operated efficiently and in accordance with EMSA requirements. Overall, the Network achieved a highly acceptable level of preparedness for oil pollution response. Of the 57 quarterly drills performed, all were assessed positively.
- 2. The evaluation of drills and exercises, either based on observations by EMSA staff present on board or on the contractor Reports, provided a number of lessons learned (described later in this report) with regard to the technical condition of the equipment and skill of the crew. A number of recommendations to be implemented in 2013 have been identified.

Findings and Recommendations

Technical

- 1. Many of the minor technical deficiencies identified could have been prevented by a thorough check of equipment directly before the quarterly drill as well as during the regular work carried out in accordance with the associated maintenance plan. The contractors should be requested to put more effort into the preparation of the quarterly drills.
- 2. There were a small number of minor breakdowns where the equipment could not be repaired on board. The contractors should be encouraged to ensure that during the

² Guidelines on the Attendance of Drills and Exercises on Board EMSA Contracted Vessels, November 2009

drill there are sufficient capabilities available to repair equipment on site, as far as is possible. This issue should be addressed by EMSA observers on board during the quarterly drills of 2013.

3. Some cases of corroded equipment were observed on board the contracted vessels. The Agency should continue to review the monthly maintenance reports for any signs of deterioration of the equipment condition due to inadequate maintenance. Special attention should be given to corrosion prevention.

Operational

- 4. One incident related to the operation of oil spill response equipment on board EMSA's contracted vessels was reported during the period. The incident took place during the fourth quarterly drill on board the vessel *Sara*. The injuries to the crew were minor due in part to the contractor having sufficient safety measures in place. Such high safety standards should be maintained during all drills and exercises. The need for continual safety training should be emphasised during all drill briefings and debriefings. Additional measures to secure the work place for responders should be considered (railings, markings, warning tables, personal safety equipment, etc.), as appropriate. Any case of safety deficiencies noted by the EMSA observers should be immediately reported to the vessel's captain. As safety on board is the responsibility of the captain, it is his/her obligation to instruct the crew and/or to implement necessary safety measures accordingly.
- 5. The assisting boat during boom deployment is a crucial element of the secondary set of pollution response equipment (boom and skimmer) on EMSA's contracted vessels. Some boom deployment and recovery issues, due to lack of skill or experience of the assisting boat skipper, were observed. It should be noted that under the VAC, the contractor is obliged to provide sufficient towing capacity. Consequently, it would be beneficial if contractors could identify skippers and boats suitable for drills, as well as for actual response operations. These boats and skippers should be hired regularly for the quarterly drills in order to accumulate training time and experience. Some form of agreement between EMSA's contractor and a boat owner regarding these activities could also be helpful. Such an agreement could be supported by State Pollution Response Authorities which may recommend suitable vessels, as listed in their contingency plan.
- 6. Much more benefit could be achieved from the operational exercises if Member States were to apply a more in-depth exercise evaluation and provide EMSA with comprehensive feedback on the performance of the EMSA vessels. The Agency, when responding to any invitation to participate in an operational exercise, should emphasise the advantages of a thorough exercise evaluation and subsequent feedback to the Agency. Attendance of EMSA observers to post-exercises debriefings is recommended.
- 7. There was a significant improvement in the outcome of notification exercises in 2012. Whereas just half of the notification exercises arranged by the Member States

in 2011 completed the procedure for mobilisation of EMSA's vessels, eleven out of the thirteen notification exercises in 2012 resulted in the signature of the Incident Response Contract (IRC). In 2013 the Agency should continue to encourage Member States to conduct full notification exercises for the mobilisation of EMSA's vessels, including the signature of the IRC.

- 8. During notification exercises it was observed that there are still some countries which do not have adequate knowledge of the procedures to mobilise EMSA's contracted vessels. The Agency has developed guidelines with regard to EMSA's procedures for the mobilisation of vessels and experts for the Member States. These guidelines were distributed to the relevant counterparts within Member States and to the Monitoring and Information Centre of DG Humanitarian Aid & Civil Protection of the European Commission (MIC) in order to support timely signature of IRCs. The further implementation of these guidelines should be set as a target in 2013.
- 9. Notification exercises proved that the Common Emergency Communication and Information System (CECIS) simplifies and facilitates mobilisation of assistance to a Member State affected by a pollution incident. EMSA should strongly encourage the use of this system during notification exercises and real incidents.
- 10. During the preparatory phase of the contract, the Agency should encourage the contractor to train the crew and to conduct equipment trials in order to achieve positive performance results before inviting the Agency to the acceptance drill.

Administrative

- 11. It would be good practice for the contractor, prior to submitting his quarterly drill report, to agree the draft with the responsible EMSA Officer.
- 12. Recommendations 5, 6, 7, 8 and 9 should be addressed during the third meeting of the Vessel Network User Group in 2013.³

³³ During the Stakeholders Consultation in the context of preparing the Agency's contribution to the Multiannual Funding Mid-term Report, the establishment of a Vessel Network User Group was proposed. The User Group was set up accordingly and a first meeting was held on 25 October 2011 at EMSA. The aim of this User Group is to strengthen the existing communication among end users of the Network and to facilitate the exchange of improvement proposals. The group met for a second time on 23 October 2012.

1. INTRODUCTION

In order to fulfil its obligation to provide additional support to the Member States' pollution response mechanisms in a cost efficient way, the European Maritime Safety Agency (hereinafter EMSA) has built up, in European waters, a Network of Stand-by Oil Spill Response Vessels. The vessels of the Network are ready to respond to oil spills at sea at the request of the coastal States⁴ or the Commission.

2012 was the seventh year of implementation of the Vessel Availability Contracts (VAC) for the Network of Stand-by Oil Spill Response Vessels. Contracted services were distributed across significant risk areas in European marine waters.

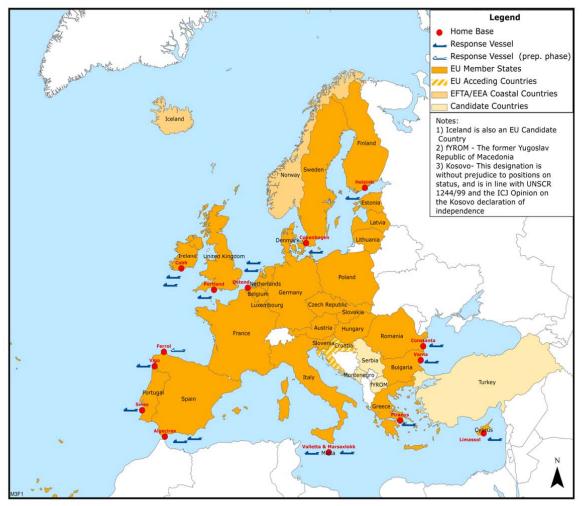
The Network is based on contractual agreements made with private entities operating/managing commercial vessels around the European coastline to provide at-sea oil recovery services. Under normal circumstances, the contracted vessels conduct their commercial activities. In the event of an oil spill and following a request for assistance, the nominated vessel ceases its commercial activities and is transformed into a certified oil recovery vessel within the contractually specified timeframe.

Vessels mobilised in such a way provide oil pollution response services to the requesting coastal States based on a pre-agreed standard Incident Response Contract (IRC) signed between the coastal State and the contractor. The IRC has been developed by EMSA in cooperation with coastal States. It addresses all responsibilities, terms and conditions for the provision of the service during an actual incident, including a fixed price, established at the moment of the VAC signature, for the services.

1.1 Vessels and Areas Covered

At the end of 2012, the Network covered all European waters and comprised 17 fully equipped vessels ready for immediate mobilisation, as well as one back-up vessel. The distribution of the Network is presented in the following map. Detailed information on the contracted vessels and areas covered can be found in Annex 1.

⁴ EU Member States, EU Candidate States, Norway and Iceland.



Distribution of Network of EMSA contracted vessels at the end of 2012

1.2 Purpose and Types of Drills and Exercises

The vessels contracted by the Agency are all equipped with state of the art oil detection, containment and recovery equipment. They are technically capable of achieving high recovery rates and have a sizeable on board storage capacity. Once the technical requirements of each contract are satisfied, the most important factors determining success of the system are the skill of the vessel's crew for the operation of the equipment and the capability of the oil spill response coordinator on board to lead the response action. It should be highlighted that during an indicant the competent national authority, usually a Supreme On Scene Coordinator instructs vessels where to carry out their oil recovery operations.

Regular training, drills and exercises are essential to achieve and maintain the appropriate level of performance.

Every VAC defines the types and number of drills and exercises to be carried out by each associated vessel. Detailed instructions on conducting drills including their methods of

evaluation, are provided in the "Guidelines on Conducting Drills and Exercises for the EMSA Contracted Vessels". These Guidelines constitute a component of nearly all contracts. The VAC defines two types of drills: 1) Acceptance Drills and 2) Quarterly Oil Pollution Response Drills, and two types of exercises: 1) Notification Exercises and 2) At-Sea Operational Exercises. Detailed definitions of drills and exercises can be found in Annex 2.

1.3 Number of Drills and Exercises Carried out in 2012

The number of drills and exercises is growing every year due to the expansion of the Network. In 2012, there were 90 events in total related to EMSA drills and exercises. The table below shows the number and types of events carried out.

Acceptance Drills: Newly Contracted Vessels	Acceptance Drills: Replacement of the existing vessels	Acceptance Drills: Improvement projects/new equipment	Quarterly Drills	Operational Exercises	Notification Exercises
2	2	4	57	12	13

Summary of Drills and Exercises carried out in 2012

2. DRILLS PERFORMED IN 2012

2.1 Acceptance Drills

In 2012, eight acceptance drills were conducted:

- Newly contracted vessel *Monte Anaga* stationed in Algeciras, Spain, pre-fitted and equipped, was tested and accepted for the stand-by phase of the contract;
- Newly contracted vessel *Entreprise* stationed in Varna, Bulgaria, pre-fitted and equipped, was tested and accepted for the stand-by phase of the contract. The vessel was accepted after the acceptance drill was repeated due to some technical deficiencies;
- Two replacement vessels, *OW Copenhagen* and *Balluta Bay*, were tested and accepted for the stand-by service;
- Acceptance test for NorMar 250 high capacity skimmer for the Aktea OSRV;
- Acceptance test for one set of 15m rigid sweeping arms for the pool of vessels contracted through James Fisher Everard;
- Acceptance test for NorMar 250 high capacity skimmer for the Sara;
- Acceptance test for the Arctia ice skimmer for the Kontio.

A more detailed description of the acceptance drills carried out in 2012 can be found in Annex 3.

2.1.1 Outcome of the 2012 Acceptance Drills

In general the acceptance drills were completed satisfactorily although a small number required additional activities by the contractor in order to achieve the required standards. One contractor was requested to repeat the acceptance drill due to technical deficiencies observed during the first drill.

General Findings

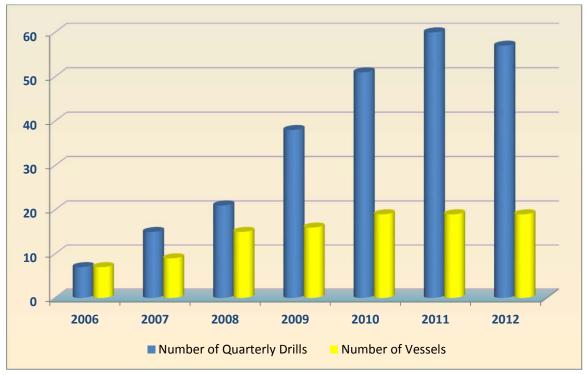
It should be noted that very often deficiencies identified on board the vessel during acceptance drills are related to simple technical and operational mistakes or omissions. This could be avoided if the contractor put more effort into the acceptance drill preparation.

Recommendation

During the preparatory phase of the contract the Agency should continue to encourage the contractor to train the crew and to conduct equipment trials in order to achieve positive performance results before inviting the Agency to the acceptance drill.

2.2 Quarterly Drills

The number of quarterly drills has increased significantly over the years as the Network has developed and expanded. A summary of quarterly drills performed by EMSA contracted vessels during the period 2006-2012 is shown in the chart below.



Number of Quarterly Drills and Contracted Vessels 2006-2012

In 2012 EMSA contracted vessels performed 57 quarterly drills of which 17 (30%) were attended by EMSA. The summary of the quarterly drills carried out in 2012 can be found in Annex 4.

2.2.1 Quarterly Drill Evaluation

Evaluation of the quarterly drills performed in 2012 is based on the reports submitted by EMSA observers and/or the contractors.

General Findings

The overall outcome of the drills carried out during 2012 demonstrated that the service is operated efficiently and in accordance with EMSA expectations. Overall, the Network achieved a highly acceptable level of preparedness for oil pollution response. In all quarterly drills crew and equipment performance was always within the standards required by the "Guidelines on Conducting Drills and Exercises for the EMSA Contracted Vessels."

The mobilisation of the vessels, which means in practical terms equipping them for the drill, was assessed as satisfactory. In all cases the equipment was loaded, installed and operated safely and correctly. Sufficient logistics to prepare vessels for the drills were in place. The time taken to deploy the major components of the oil recovery equipment was satisfactory and the knowledge of on board arrangements was good.

Reports (contractors' reports and EMSA reports) from the quarterly drills show a variety of minor technical and operational problems to be solved, in order to improve the vessel performance or to restore the performance to a satisfactory level.

The analysis of all the reports showed that the deficiencies encountered during quarterly drills in 2012 were as follows:

Technical deficiencies:

Equipment	Technical problem	
Seadarq server	The server does not always successfully boot (power supply failure), possible damage to the main board, memory fault.	
HDB 2000	Plastic/nylon lining from inside the air chambers blocked the air valves.	
Ro-boom	Last 1m of the second boom was torn off.	
Autoboom 2200	Chamber from the first section open by the edge became flat.	
HAB 200	Hydraulic oil leakage in boom compressor.	
250 TI	Hydraulic leak from the valve in the base.	
CLAYTON Steamer	Broken pipe (water supply).	
Vogelsang Pump	Discharging pump jammed with sand.	
Oil hoses	Corroded steel flanges.	

List of specific technical problems recorded in 2012

Boom inflation

Most mechanical failures of the equipment in 2012 were related to the oil boom damage. Several cases of problems related to boom inflation were observed, e.g. leaking air valves, punctured boom chambers or damaged air hoses.

• Hydraulic systems

Hydraulic systems are considered to be the most vulnerable part of the oil pollution response equipment. In some cases leaks of hydraulic hoses, failures of connections and problems with hydraulic valves, pumps or other parts were observed.

• Radio remote control

Most of the free floating skimmers on board EMSA's vessels are steered via radio remote control devices. As opposed to previous years, no failures of such devices due to problems with appropriate radio frequencies, batteries and electronic panels were observed.

Corrosion

Corrosion can seriously hamper performance of the equipment, especially pumps. Rusty equipment (including pumps) was reported several times in 2012.

Operational deficiencies:

• Safety on board

A limited number of cases were observed of behaviour of the crew deploying or recovering equipment that was not as safety focused as it should have been.

Examples of unsafe behaviour were especially observed when technical problems with the equipment deployment occurred such as incorrectly attached or stacked lines, boom jammed on the reel, or difficulties locating the sweeping arm on the stand.

One significant accident was observed during a quarterly drill. In the process of the boom retrieval, at the very beginning of the operation, the reel bar (on the bottom of the boom platform) bent and came free from its housing. This resulted in injuries to two crew members and outside emergency assistance was requested. As a precautionary measure the injured crew members were helicoptered to a hospital. Following a medical check, both crew members were released and returned on board the vessel the same day.

• Boom towing

On board most of EMSA's contracted vessels, booms are deployed from the side of the vessel at a right angle to the vessel's course. Such a type of deployment requires a high level of manoeuvring, and experience on the part of the skipper of the boom towing boat. It was observed in some cases that these skills or experience were insufficient, causing problems and delays in the boom deployment or retrieval. One of the reasons could be that the chartered (boom towing) boat is often different from drill to drill.

All of the reported technical deficiencies were pointed out to the contractors in order to be rectified. Some operational deficiencies, such the skills of the boom towing skipper and on board safety issues, require a more in-depth approach.

Recommendations

Technical:

The majority of these technical deficiencies could be prevented by a thorough check of equipment directly before the quarterly drill as well as during the regular work carried out in accordance with the maintenance plan.

In parallel, contractors experiencing such difficulties should ensure that during the drill there are sufficient equipment spare parts available on board (especially for vulnerable elements of the hydraulic system) and skilled technicians able to replace damaged parts. This issue should be addressed by EMSA observers on board during the quarterly drills of 2012.

Preventing corrosion is strictly a matter of proper equipment maintenance. Equipment which was in contact with salt water should be rinsed with fresh water directly after the drill and before returning to storage. Equipment should be treated more often with surface protecting coatings, lubricants and paint by the contractors. The Agency should analyse carefully the monthly maintenance reports and look out for any signs of deterioration of the equipment condition due to inadequate maintenance. The differences between equipment stored on board or at shore should be borne in mind in order to adapt the maintenance plan for the different situations.

Operational:

• Safety on board

Safety on board during the equipment deployment remains a vitally important aspect which requires a consolidated approach. Firstly there is a need for continual safety training. This issue should be recalled particularly during briefings before and debriefings after each quarterly drill. Secondly, additional measures should be considered to secure the work place for responders (railings, markings, warning tables, personal safety equipment, etc.), as appropriate. Thirdly, any case of safety deficiencies noted by the EMSA observers should be reported at once to the vessel's captain for immediate rectification. As safety on board is the responsibility of the captain it is his/her obligation to instruct the crew members and/or to implement the necessary safety measures.

• Boom towing

A boom towing boat is an indispensable element of the secondary set of pollution response equipment (boom and skimmer) of each of EMSA's contracted vessels. It should be noted that the towing boat is neither covered by the VAC, nor is part of the equipment financed by the Agency. It is the contractor's responsibility to hire the boat for the purpose of a quarterly drill in order to deploy the boom. Many

contractors do this on a flexible basis, depending on availability at that moment on the local market. This may result in variable performance depending on the skills and experience of the boat's skipper.

It could be beneficial for the contractors to identify skippers and boats suitable for drills, as well as for real response operations. These boats and skippers should be hired regularly for the quarterly drills. Some form of an agreement between the contractor and a boat owner regarding these activities could be also helpful. Moreover such an agreement might be supported by State Pollution Response Authorities which may recommend suitable boats listed in their contingency plan. This could be beneficial for all sides, ensuring training opportunities for the boom towing boats, better integration of EMSA's contracted vessels with the local/national response system, better performance during drills and exercises and thus better preparedness to respond to real spills in the area.

This solution could be proposed and discussed during the planned 3rd meeting of the Vessel User Group (VUG) in October 2013.

General:

All of the contracted vessels are engaged in various commercial activities. Activities related to EMSA's contract are additional activities. Time spent by the crews of EMSA's contracted vessels to develop and train their pollution response skills is limited. It must therefore be emphasised that further intensive, practical, and regular training for oil spill pollution response is necessary to ensure that all EMSA contracted vessels are ready for real response operations.

2.2.2 Quarterly Drill Report

The contractor is obliged to submit a quarterly drill report to EMSA. The acceptance of the contractor's report and associated invoice by EMSA is the condition for the payment of the vessel availability fee. The report should be provided on a template developed by the Agency.

General Findings

All reports in 2012 were accepted by the Agency. On the basis of these reports, the contractors were paid the vessel availability fee.

Often the contractor's reports could be more comprehensive, especially with regard to technical and operational issues to be addressed in order to improve the service.

Recommendations

It would be good practice if the contractor, before submitting his quarterly drill report, agreed the draft with the responsible EMSA Officer.

2.2.3 Drill and Exercise Attendance Guidelines

The direct monitoring and observation carried out by EMSA of the Network of Stand-by Oil Spill Response Vessels' performance during drills and exercises is indispensable in the verification of the contract implementation. It ensures that the contract is effectively implemented and gives the Agency the opportunity to react immediately in order to address any shortcomings.

In 2009, EMSA produced internal "Guidelines on the Attendance of Drills and Exercises on Board EMSA Contracted Vessels." In general, the Guidelines require the presence of EMSA staff on board each contracted vessel at least twice a year during drills and/or exercises. EMSA participation in all drills on board newly contracted vessels during the first year of the stand-by phase of the contract is recommended. The purpose of EMSA's frequent attendance is to ensure the familiarisation and consolidation of the vessel crew with the level of the required performance, as the contractors often do not have adequate experience, knowledge and skills to achieve the level of preparedness required by EMSA.

For more experienced contractors, the presence of EMSA observers on board is required two times per year (e.g. one exercise and one quarterly drill). The Agency has given those contractors who perform well the responsibility for self-evaluation and self-improvement. All contractors provide EMSA with information regarding their performance during drills and exercises using specially designed drill and exercise report templates.

In cases when there are any indications that the contractor's performance does not meet the required standards, further drills are attended by EMSA until the vessel achieves a satisfactory level of performance.

General Findings

In 2012 EMSA observers attended 17 quarterly drills out of 57, corresponding to an attendance rate of 30%. In addition, all at-sea operational exercises, except two, were attended by EMSA. Consequently most of the vessels were visited 2 times per year by the Agency's representatives. However there were some vessels which were visited only once.

2.2.4 Equipment Management

Checking the technical status and completeness of the oil pollution response equipment on board the vessels is an important element of each drill attended by EMSA observers.

The "Pollution Asset Management System (PAMS)" was set up in 2010 in order to strengthen the management of the oil pollution response equipment assets. The system will be applied for new vessel arrangements contracted in the future. The equipment inventory of each stockpile is verified annually based on an equipment list and equipment labels which display an appropriate code identifying each part of the equipment.

2.2.5 Technical Issues Record

On the basis of observations from drills and exercises, the Agency keeps a record of technical issues related to the oil pollution response equipment on board EMSA's contracted vessels.

This record allows the Agency to obtain a broader overview of the performance of different types and brands of equipment. Identification of the most frequent technical problems leads to prevention of failures during actual pollution response and also helps the acceptance process for equipment arrangements in the framework of the vessel tenders and improvement projects.

The record may support sharing of experience and dissemination of good practice between EMSA and Member States (e.g. during the Vessel User Group meetings).

3. EXERCISES PERFORMED IN 2012

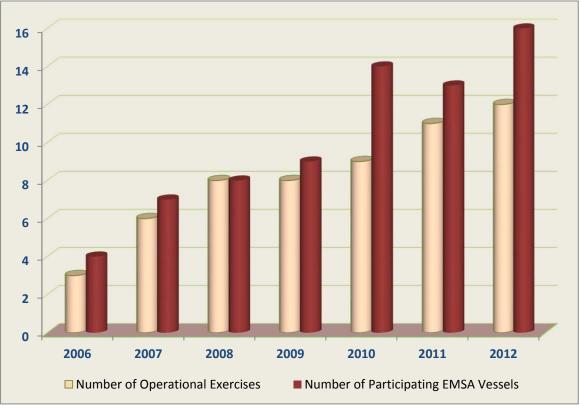
At-sea operational exercises greatly assist the integration of EMSA's resources within the response mechanisms of Member States, improving the necessary coordination and cooperation of the EMSA vessels with the coastal State response units. In the course of 2012, 13 different EMSA Stand-by Oil Spill Response Vessels participated in 12 at-sea operational exercises, organised in cooperation with EU Member States and/or Regional Agreements. The total number of Exercise Days with the participation of EMSA contracted vessels was 16. These events took place in the Baltic Sea, North Sea, Bay of Biscay, Atlantic Coast, Mediterranean and Black Seas.

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 EU cooperation civil protection mechanism were organised by the Agency.

3.1 Operational Exercises

The number of operational exercises has increased significantly over the years. Each year of Network development has brought the expansion of the response area and through exercises, the improvement of the integration of the EMSA contracted vessels with the marine pollution response mechanisms of the Member States.

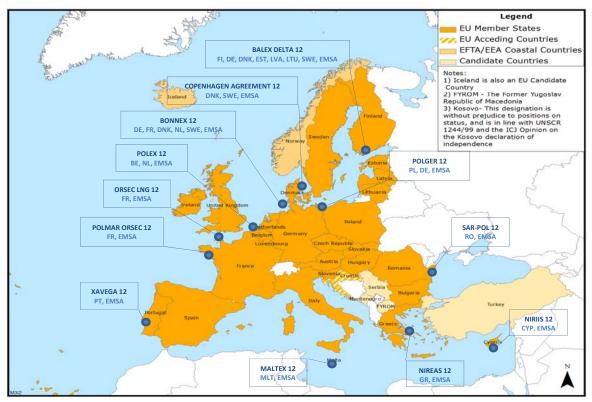
The summary of operational exercises performed by EMSA contracted vessels during the period 2006-2012 is shown in the chart below.



Number of Operational Execises and participating EMSA Vessels 2006-2012

The number of operational exercises per year differs from the number of participating EMSA vessels as more than one EMSA vessel can participate in an exercise. For the purpose of statistics, when the same vessel participated in more than one exercise during the year it was counted as a separate vessel for each exercise.

During 2012, EMSA contracted vessels participated in 12 national and regional at-sea exercises. The geographical spread of operational exercises in Europe with EMSA vessel participation is shown in the following map:



Operational Exercises 2012 and Participating Parties

A detailed overview of the operational exercises carried out in 2012 can be found in Annex 5 to this Report.

General Findings

It should be noted that the operational exercises at sea are organised by the Member States within the framework of national or regional contingency plans. EMSA, as a guest to these exercises, usually has a limited influence on their content.

In 2012, Agency staff attended all operational exercises that involved the participation of EMSA contracted vessels, except in two cases. In general, the results of these exercises showed that EMSA vessels were well integrated into the pollution response mechanisms of Member States and Regional Agreements. Reports of EMSA observers indicate that all vessels participating in the operational exercises successfully completed the tasks assigned by the pollution response command of the country hosting the exercise.

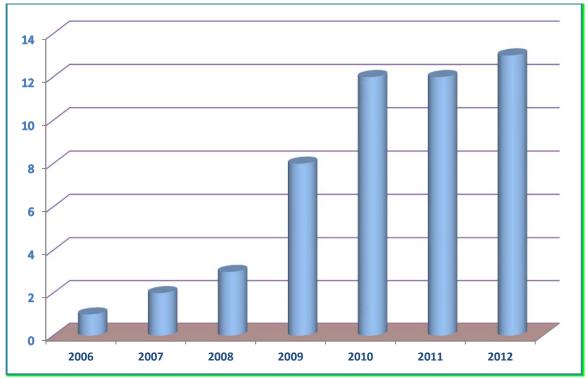
All of the exercises were considered a success. However, with the exception of one exercise, there was also a lack of written feedback from the host country on the performance of EMSA's vessels. It should nevertheless be noted that in the context of the Vessel User Group, several exercises were presented by the organisers.

Recommendations

Much more benefit could be derived from the operational exercises if Member States were to apply a more in-depth exercise evaluation system and provide EMSA with a comprehensive feedback on the performance of EMSA's contracted vessel. Based on the exercise evaluation, the Agency would be able to take measures to improve the response capabilities of the Vessel Network and to strengthen its integration in the response mechanisms of the Member States. Therefore the Agency, responding to any invitation to participate in the operational exercise, should emphasise the need for a thorough exercise evaluation and subsequent feedback to the Agency. This issue could be also addressed during the third Vessel User Group in 2013.

3.2 Notification Exercises

Although 'standalone' notification exercises are occasionally carried out, notification exercises are usually conducted prior to an operational exercise and may be initiated either by EMSA or by a Member State. The aim of these exercises is to test and implement agreed procedures and lines of communication for reporting incidents and for requesting and providing assistance. Notification exercises usually involve EMSA, the contractor, one or more Member State(s) and the MIC. The main criterion for the evaluation of the notification exercise is the time needed for the Incident Response Contract (IRC) to be signed by both the EMSA contractor and the Member State requesting assistance.



Number of Notification Exercises 2006 - 2012

In 2012, 13 Notification Exercises involving 15 different EMSA contracted vessels, aiming to evaluate the agreed emergency and notification procedures between EMSA, Member

States, EMSA contractors and the MIC⁵, were organised by the Agency. A detailed description of these exercises can be found in Annex 6.

As a result of the notification exercises, 15 exercise Incident Response Contracts were signed between different coastal States and EMSA contractors in 2012.

Findings

During the Notification Exercise, the timing begins at the moment the formal assistance request, sent via the MIC, is received by EMSA. Taking into account variables such as the time of day, the day of the week, the contractor's location, time difference between Portugal and other Member States, etc., 6 hours is seen as an acceptable target deadline for all parties to sign. During the conduct of the exercise, the Agency provides any assistance necessary to the Member State to help them in the process of completing and signing the IRC.

It must be noted that of the 13 notification exercises carried out in 2012, 11 exercises included the full procedure of EMSA vessel mobilisation by way of the signature of the IRC and in total 15 IRCs were signed. This was a significant improvement in relation to 2011 when the IRC signature was only achieved in in 6 cases out of a total of 12 notification exercises. In 2012, only one exercise was terminated by the host country after receiving information on vessel availability. The Member State hosting this exercise lost an excellent opportunity to test their internal channels and procedures for the mobilisation of EMSA's vessels.

The CECIS⁶ system operated by the MIC should be used by Member States for the mobilisation of vessels; however this is not always done. In 2012, 10 out of 13 exercises were conducted with the use of CECIS which was a slight improvement on the 8 exercises out of 12 that involved the use of CECIS in 2011.

Recommendations

In 2013 EMSA should encourage Member States to conduct the complete notification exercises for the mobilisation of EMSA's vessels including the signature of the IRC.

During the 1st Vessel User Group meeting, held on 25 October 2011, it was agreed with the Member States that there was a need to develop guidelines in order to facilitate the mobilisation procedure of the EMSA contracted vessels. In order to address this issue, in 2012 the Agency developed the "EMSA Network of Stand-by Oil Spill Response Vessels – User Guide" for the Member States. The Guide includes detailed and user-friendly step-

⁵ 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 key coordination role during emergencies.

⁶ The Common Emergency Communication 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.

by-step procedures on the mobilisation of EMSA contracted vessels by the Member States. During the Notification Exercises conducted in 2012 the Guide was already used by some Member States, who provided feedback to confirm that it was a beneficial tool. Further implementation of User Guide in 2013 is recommended.

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.

In addition, the CECIS system operated by the MIC 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 and EMSA will continue to strongly encourage the use of CECIS during the notification exercises.

These issues regarding the notification exercises should also be addressed during the third Vessel Network User Group in 2013.

4. CONCLUSIONS

Drill and Exercise Evaluation

- 1. The overall outcome of the drills and exercises carried out during 2012 demonstrated that the service is operated efficiently and in accordance with EMSA requirements. Overall, the Network achieved a highly acceptable level of preparedness for oil pollution response. Of the 57 quarterly drills performed, all were assessed positively.
- 2. The evaluation of drills and exercises, either based on observations by EMSA staff present on board or on the contractor Reports, provided a number of lessons learned with regard to the technical condition of the equipment and skill of the crew. A number of recommendations to be implemented in 2013 have been identified.

Recommendations

Technical

- 1. Most of the technical deficiencies identified in 2012 could be prevented by a thorough check of the equipment directly before the quarterly drill, as well as during the regular maintenance provided in accordance with the Maintenance Plan. The contractors should be requested to put more effort into the quarterly drill preparations.
- 2. The contractors should ensure during the drill that there are sufficient equipment spare parts available on board, (especially for vulnerable elements of the hydraulic system), and skilled technicians able to replace damaged parts. This issue should be addressed by EMSA observers on board during the quarterly drills of 2013.
- 3. The Agency should examine closely the monthly maintenance reports and any signs of deterioration of the equipment condition due to inadequate maintenance. During the annual verification of the Equipment Inventory, special attention should be paid to corrosion prevention.

Operational

4. Safety on board during the equipment deployment remains a concern and requires a consolidated approach. Firstly there is a need for more safety training. This issue should be recalled during all briefings before and de-briefings after each quarterly drill. Secondly, all possible measures to secure the work place for responders should be applied (e.g. railings, markings, warning tables, personal safety equipment, etc.), as appropriate. Thirdly, any case of safety deficiencies noted by the EMSA observers should be immediately reported to the vessel's captain in order to trigger his/her response. As safety on board is the ultimate responsibility of the captain it is his/her obligation to instruct the crew members and/or to implement necessary safety measures.

- 5. A boom towing boat is an indispensable element of the secondary set of pollution response equipment (boom and skimmer) on board each EMSA contracted vessel. It would be beneficial if the contractors could identify skippers and boats suitable for drills, as well as for the real response operations. These boats and skippers should be hired regularly for the quarterly drills in order to accumulate the training time and experience. Some form of an agreement between the EMSA contractor and boat owner regarding these activities would also be helpful. Moreover, such an agreement could be supported by State Pollution Response Authorities which may recommend suitable boats, as listed in their contingency plan.
- 6. It is clearly stated in the contract that the ship master cannot play the role of the oil spill response coordinator. Consequently, the appointed oil spill response coordinator must be present at all times on the bridge in order to maintain communications with other vessels participating in the response activities and especially to coordinate movements of the boom towing boat. Contractors who are in the breach of this role should be requested to train appropriately the oil spill response coordinator and results of the training should be verified during the next quarterly drill. In addition, the tasks and responsibilities of the on board oil spill response coordinator could be addressed during the quarterly drill briefings.
- 7. Much more benefit could be achieved from the operational exercises if Member States were to apply a more in-depth exercise evaluation and provide EMSA with comprehensive feedback on the EMSA vessels' performance. Based on the exercise evaluation the Agency would be able to take measures to improve the response capabilities of the Vessel Network and to strengthen its integration with the response mechanisms of the Member States. The Agency, when responding to any invitation to participate in an operational exercise, should emphasise the need for a thorough exercise evaluation and subsequent feedback to the Agency.
- 8. In 2013 EMSA should encourage Member States to conduct the complete notification exercises for the mobilisation of EMSA's vessels, including the signature of the IRC.
- 9. CECIS simplifies and facilitates mobilisation of assistance to a Member State affected by a pollution incident and EMSA should strongly encourage the use of this system during the notification exercises.

Administrative

- 10. During the preparatory phase of the contract, the Agency should encourage the contractor to train the crew and to conduct equipment trials in order to achieve positive performance results before inviting the Agency to the acceptance drill.
- 11. It would be good practice if the contractor, before submitting the quarterly drill report, agreed the draft with the responsible EMSA Officer.
- 12. Recommendations 5, 7, 8 and 9 should be addressed during the third meeting of the Vessel Network User Group in 2013.



Network of Stand-by Oil Spill Response Vessels: Drills and Exercises Annual Report 2012

ANNEX 1: Overview of EMSA Contracted Vessels and areas covered

The Baltic Sea

At the end of 2011, a new contract was signed with O.W. Tankers regarding the bunker vessel *OW Copenhagen*. Following the sale of the flexible sweeping arms, the remaining equipment from the expiring contract was handed over to O.W. Tankers in February 2012.

After a preparatory period (including purchase of new rigid sweeping arms), the vessel entered into the stand-by phase of the contract, i.e. ready to recover oil, in mid-2012. *OW Copenhagen* has a total net storage capacity of 4,450 m³.

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 m³. 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 Oulu, Finland. For the remaining part of the year the equipment and vessel are located in Helsinki, Finland.

The total contracted on board storage capacity for oil recovery during response operations for the Baltic Sea is now almost 6,500 m³.

The North Sea

The North Sea is one of the sea areas with the highest tanker traffic density. During 2012, the existing 3-year contract for two hopper dredgers trading sand along the Belgian and Dutch coastlines, the *Interballast III* (storage capacity 1,886 m³) and *DC Vlaanderen 3000* (storage capacity 2,744 m³), was renewed following a performance assessment. The two ships provide a combined recovered oil storage capacity of more than 4,500 m³.

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 combined storage capacity of 14,536 m³). These vessels are complemented by the arrangements in place in Spain and Portugal. The supply ship *Ria de Vigo*, which has an on board storage capacity of 1,522 m³ 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 m³ of on board recovered oil storage capacity.

The total recovered oil storage capacity under contract is therefore in excess of 20,000 m³ for the Atlantic coast from the English Channel to Europa Point.

Mediterranean Sea

Following a successful procurement procedure, at the end of 2012, a new 4-year contract was awarded to the Maltese company SL Ship Management Company Ltd, a subsidiary of the Falzon Group, for the replacement of existing response capacity in Central Mediterranean Sea due to the expiration, without possibility of further renewal, of the

contract signed in 2006. The tanker *Santa Maria*, 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 2,800 m³. As part of the Preparation Phase, the *Santa Maria* will undergo an ambitious plan of improvements to the on board systems and oil pollution response equipment. The Stand-by Phase is expected to begin in mid-2013 at the latest.

The *Monte Anaga*, for which a 4-year contract was awarded for the provision of at-sea oil recovery services at the end of 2011, entered into the Stand-by Phase of the contract in June 2012.

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

- Bahia Uno, based in Algeciras, Spain;
- Balluta Bay, based in Malta;
- *Aktea OSRV*, supported by the back-up vessel *Aegis I*, based in Piraeus, Greece; and
- Alexandria, based in Limassol, Cyprus.

By mid-2013 the total net storage capacity under contract for the Mediterranean Sea will be approximately 26,000 m³.

The Black Sea

At the end of 2011, a 4-year contract was awarded to the Bulgarian company BM Gust. The vessel providing the oil recovery services, offshore supply vessel *Enterprise*, which services the Varna oilfield area about 12 nautical miles offshore, completed the Preparation Phase in 2012. She has a storage capacity of 1,374 m³. The vessel was accepted by the Agency and entered into Stand-by Phase of the Contract on 21 December 2012.

The vessel *GSP Orion*, operating out of Constanta, Romania, is also under contract with the Agency for the Black Sea area.

With the aforementioned new contractual arrangement in place, at the end of 2012 the total contracted on board storage capacity for oil recovery for the Black Sea was more than $2,700 \text{ m}^3$.



Network of Stand-by Oil Spill Response Vessels: Drills and Exercises Annual Report 2012

ANNEX 2: Definition of Drills and Exercises

Drills

The Vessel Availability Contract (VAC) defines two types of drills: Acceptance Drills and Quarterly Oil Pollution Response Drills.

Acceptance Drill

The acceptance drill is carried out at the end of the preparatory phase of the contract. The purpose of the drill is for the contractor to demonstrate to EMSA that the modifications to the vessel, the oil pollution response equipment installation, and crew training were successfully implemented in order for the vessel to undertake the contracted tasks. The acceptance drill is accompanied by an assessment of the vessel and oil pollution response equipment, and the issuing of relevant certificates by the Agency.

If the evaluation of the acceptance drill is satisfactory, the vessel is admitted to the next phase of the contract: stand-by oil pollution response service. The preparatory phase must be completed within the timeframe set in the contract.

Acceptance drills are also performed in order to accept changes to the stand-by oil pollution response services, e.g. when the vessel providing the service has been replaced by other vessel or when new (or overhauled) equipment has been installed on board.

The contractor has a right to replace the vessel contracted under the VAC on the condition of providing equivalent, or surpassing existing storage and oil recovery capacities. In such a case, all related pre-fitting costs are borne by the contractor. The preparatory phase deadline also depends on the contractor. The originally contracted vessel provides services until the replacement is accepted by the Agency.

Based on the experience gathered during drills and exercises, the pollution response capacity of EMSA's contracted vessels is often upgraded through "improvement projects". Within the framework of such projects, usually new equipment or vessel response system modifications are introduced on board. Any change related to the stand-by oil pollution response services has to be accepted by the Agency after completion of an acceptance drill.

Quarterly Oil Pollution Response Drill

According to the contract, the contractor is obliged to train his crew and to maintain the oil pollution response equipment in order to be ready to carry out oil pollution response services efficiently. To demonstrate the fulfilment of these obligations, the contractor is obliged to carry out drills, usually on a quarterly basis. The drills can be assessed by EMSA observers. The acceptance of the contractor's Quarterly Drill Report by the Agency is a condition for the payment of the Availability Fee by the Agency.

Exercises

The Vessel Availability Contract defines the following types of exercises:

Notification Exercises

The aim of a notification exercise is to verify the performance of the agreed emergency and notification procedures and lines of communication for reporting, requesting and providing assistance to Member States. The oil pollution response equipment and the vessel are not used during such an exercise.

Operational Exercises

Operational exercises involve actual mobilisation of a vessel, crew and equipment. In general, 3 main types of operational exercises can be requested by EMSA:

1. Vessel mobilisation exercise

The purpose of this exercise is to test the contractor's ability to mobilise the vessel within the timeframe set in the contract. In accordance with the contract, EMSA may only request this type of exercise once during the contractual period. The decision to launch this exercise is taken by EMSA on the basis of the evaluation of the contractor's performance during the contract implementation. The exercise is likely to be launched should there be any doubts over the contractor's ability to mobilise the vessel according to the contract requirements.

2. Oil pollution response equipment mobilisation exercise

The purpose of this exercise is to test the contractor's contingency arrangements. This type of exercise involves the equipment only and is applicable only to the equipment depots. The vessels are not involved.

EMSA may launch this type of exercise twice during the contractual period. Under normal circumstances, equipment mobilisation also forms part of the quarterly drills and other types of operational exercises, so stand-alone equipment mobilisation exercises will only occur if there are insufficient drills and other operational exercises to confidently verify the contractor's readiness.

3. International/EMSA exercise

This type of exercise involves individual or multiple EMSA contracted vessels and their equipment, and other vessels and equipment of the Member States participating in the exercise. These exercises are normally organised by a Member State individually or within the framework of a Regional Agreement. They can also be arranged by EMSA. The main elements to be practised during an International Exercise are typically the following:

- Loading and fitting the equipment;
- Deployment of the equipment;
- Cooperation with other vessels and with the command structure of the Member State requesting assistance;
- Communication with other vessels, aircrafts and land stations;
- Vessel and equipment handling during a response operation;
- Administrative procedures: Incident Response Contract, harbour fees, etc.

The at-sea operational exercise is normally arranged in such a way that participating parties, under the operational command of the exercise organiser, shall respond at sea to a virtual oil spill under a pre-defined scenario. The exercise includes establishing the command structure, forming the strike teams, allocating tasks, executing tasks (e.g. equipment deployment and oil recovery), communication and cooperation.



Network of Stand-by Oil Spill Response Vessels: Drills and Exercises Annual Report 2012

ANNEX 3: Overview of the Acceptance Drills carried out in 2012

Acceptance Drills conducted by the Agency in 2012

Eight acceptance Drills were conducted in 2012.

Two acceptance drills related to newly contracted vessels, two drills related to recontracted vessels and four drills concerned technical improvements to the Network. The Acceptance Drills for new/re-contracted vessels are of particular importance as they are the major milestone for new vessels to enter into the Stand-by Phase of a contract. Acceptance Drills are also used in order for any technical improvements to be recognised as operational and in 2012, four such projects were also subject to acceptance tests:

- Improvement of the pollution response capacity of the *Aktea OSRV* for the Aegean Sea. A NorMar 250 high capacity skimmer was added to the equipment.
- 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 was added to the stock pile arrangement in Cobh, Ireland.
- Improvement of the pollution response capacity of the *Sara* for the Atlantic and Channel. A NorMar 250 high capacity skimmer was added to the equipment.
- Improvement of the pollution response capacity of the *Kontio* for the Northern Baltic. A Lamor Arctic Skimmer LAS 125 ice skimmer was added.

The table below summarises the vessel acceptance drills carried out in 2012.

Acceptance Drill	Remarks
Newly contracted vessel: Monte Anaga	Entry into Stand-by Phase of the Contract (Western Mediterranean Sea)
Newly contracted vessel: Entreprise	Entry into Stand-by Phase of the Contract (Black Sea)
Re-contracted vessel OW Copenhagen	Entry into Stand-by Phase of the Contract (Southern Baltic Sea)
Re-contracted vessel Balluta Bay	Entry into Stand-by Phase of the Contract (Central Mediterranean Sea)
Acceptance test for NorMar 250 high capacity skimmer for the <i>Aktea OSRV</i>	Improvement of the oil pollution response capacity (Aegean Sea)
Acceptance test for one set of 15m rigid sweeping arms for the pool of vessels contracted through James Fisher Everard	Improvement of the oil pollution response capacity (Atlantic Coast)
Acceptance test for NorMar 250 high capacity skimmer for the <i>Sara</i>	Improvement of the oil pollution response capacity (Atlantic and Channel)
Acceptance test for the Arctia ice skimmer for the <i>Kontio</i>	Improvement of the oil pollution response capacity (Northern Baltic Sea)

Acceptance Drills carried out in 2012

Acceptance of the *Monte Anaga*

The Acceptance Test on board the *Monte Anaga* was carried out on 18-20 June in Algeciras, Spain. The results of the test showed that the ship was technically ready for the next phase of the Contract, stand-by oil recovery services.

All the relevant pre-fitting works had been carried out in accordance with the contractor's plan and were found to be in place. The arrangement of oil pollution response equipment was found complete and fully in accordance with the Contract.

During the 'first drill' the following points were noted:

- Full arrangement of oil spill response equipment was found operational;
- The primary system (sweeping arms) was positively tested at sea. The secondary system (boom and skimmer) was found operational and tested in open sea performing the usual recovery configurations (open-U and J formations);
- Different hydraulic and pumping tests were performed with positive results;
- Heating, decanting and discharging systems were found fully operational and up to contracted levels;
- Oil slick detection system, Seadarq, was found fully operational and the crew well trained to use it;
- The crew was found sufficiently trained and with good level of coordination.

Consequently a Vessel Acceptance Note for the *Monte Anaga* was issued effective from 20 June 2012.

Acceptance of the *Enterprise*

The acceptance test of the enterprise was carried out on 21-22 November in Varna, Bulgaria.

The results from the Acceptance Test on board the *Enterprise* showed that:

- Relevant pre-fitting works have been carried out in accordance with the contractor's plan and were found to be in place;
- The inventory of oil pollution response equipment was found complete and fully in accordance with the Contract;
- The primary system (sweeping arms) was positively tested at sea;
- Different pumping tests were performed with positive results;
- Heating and discharging systems were found operational;
- Oil spill detection system Miros was found operational.

However, a number of open issues and deficiencies were identified during the Acceptance Test on board the Enterprise. The boom system Lamor HDB 2000 was operational and J formation was achieved. However, the performance at sea showed lack of sufficient training in order to properly operate the equipment. In particular, the procedure for setting up the boom ropes and fastening the boom to the vessel needs to be improved to ensure safe and smooth operation of the system.

The skimmer Lamor LWS 1300 was deployed into the sea and showed good manoeuvrability, the brushes of the module worked properly. Nevertheless, the following remarks were noted:

- Deployment and recovery procedure of the skimmer had to be improved.
- The brush module was installed with the MSP pump which is designed to work with the weir module. Because of this, the pump test could not be exercised to the full extent.
- The flat oil hoses of the skimmer, when it was fully deployed, could not reach the drop lines on deck.
- One of the sweeping arms pump (Lamor GTA 140) was damaged during the commissioning of the equipment with Lamor. Due to the late delivery of the spare parts by the manufacturer, this pump was not repaired and consequently not operational during the acceptance test.
- One of the three Lamor power packs was overloaded during the tests and overheated.
- In accordance with the technical specification agreed the vessel had four discharging pumps (two rotor pumps, capacity of 300 m³/h each, supplied within the EMSA project and two additional centrifugal pumps with a capacity of 150 m³/h each). During the discharge test, it was found that the two rotor pumps could not work simultaneously. The two centrifugal pumps can be used together with one of the rotor pumps, reaching a total capacity of 600 m³/h which was acceptable from the performance point of view. However, in the discharge diagram of the vessel, as approved by RINA, only the two rotor pumps are included.
- In accordance with the tender specifications, drip trays had to be provided in order to keep the deck as clean as possible when involved in oil pollution response activities. In addition, the "dirty areas" will be separated from the "clean areas" as far as possible. In order to meet this requirement, Bon Marine had separated the deck into compartments, wood covered, which would prevent the contamination from one place to another. However, no drip trays had been installed.
- At the time of conducting the Acceptance Test, issuance of the Class and Statutory certificates was still pending. The final acceptance of the vessel by the Agency was subject to the issuance by the Classification Society (RINA) of the required certificates.

Following the number of unresolved technical issues EMSA requested the contractor to repeat the Acceptance Test after removing all noted discrepancies.

The repetition of the Acceptance Test (respective parts only) was performed on 4 December 2012 in order to check that the deficiencies found during the first test had been remedied by the contractor.

The results the Acceptance Tests on board the *Enterprise* showed that the vessel was technically ready for the next phase of the Contract, Stand-by oil recovery services.

All the relevant pre-fitting works have been carried out and found in place.

The arrangement of oil pollution response equipment was found complete and fully in accordance with the Contract.

The following points were noted:

- Full arrangement of oil spill response equipment was found operational;
- The primary system (sweeping arms) was positively tested at sea;
- The secondary system (boom and skimmer) was found operational and tested in open sea performing J formation;
- Different pumping tests were performed with positive results;
- Heating, decanting and discharging systems were found operational and up to contracted levels;
- Oil spill detection system Miros was found operational;
- The crew was found sufficiently trained and showed good level of coordination.

The only remaining issue after the acceptance test was the provision of the Class Certificate by RINA with the "Oil Recovery Notation".

The Certificate was issued on 19 December. Consequently, an Acceptance note for the Enterprise was issued effective from 21 December 2012.

Acceptance of the OW Copenhagen

The Acceptance Test on board *OW Copenhagen* was carried out on 11 July 2012 in the vicinity of the Port of Copenhagen. The vessel inspection was carried out prior to the Acceptance Drill.The results from the Acceptance Test on board the *OW Copenhagen* showed that the ship is ready for the next phase of the Contract - stand-by oil recovery services. All the relevant pre-fitting works had been completed in accordance with the Contract. The arrangement of oil pollution response equipment was found to be complete and fully operational.

During the 'first drill' the following points were noted:

- The primary system (sweeping arms) was positively tested at sea. The secondary system (boom and skimmer) was found operational and tested in open sea performing the usual recovery configuration (J formation);
- Different hydraulic and pumping tests were performed with positive results;
- Heating, decanting and discharging systems were found fully operational and up to contracted levels;
- Oil slick detection system, Seadarq, was found fully operational and the crew well trained to use it;

• The crew was found sufficiently trained and with good level of coordination.

Based on the results of the Acceptance Test an Acceptance Note for the *OW Copenhagen* was issued effective from 12 July 2012.

Acceptance of the Balluta Bay

The Acceptance Test on board the Balluta Bay was carried out on 14-15 August 2012 in La Valetta, Malta. The results from the test showed that the ship was technically ready for the next phase of the Contract, stand-by oil response services.

All the relevant pre-fitting works had been carried out in accordance with the contractor's plan and were found to be in place. The arrangement of oil pollution response equipment was found complete and fully in accordance with the Contract.

During the 'first drill' the following points were noted:

- Full arrangement of oil spill response equipment was found operational;
- The primary system (sweeping arms) was positively tested at sea. The secondary system (boom and skimmer) was found operational and tested in open sea performing the usual recovery configuration (J formation);
- Different hydraulic and pumping tests were performed with positive results;
- Heating, decanting and discharging systems were found fully operational and up to contracted levels;
- Oil slick detection system, Seadarq, was found fully operational and the crew well trained to use it;
- The crew was found sufficiently trained and with good level of coordination.

Consequently, a Vessel Acceptance Note was issued for the *Balluta Bay* effective from 15 August 2012.

Acceptance of the high capacity skimmer on board the Sara

In accordance with Amendment No. 2 to the Contract, the pollution response capacity of the *Sara* was upgraded with a new NorMar 250 TI high-capacity skimmer.

The new equipment was delivered in Portland, UK on 5 November 2012. The commissioning, tests and the training were performed by the manufacturer (AllMaritim) from 5 until 10 November 2012.

The Acceptance Test of the new equipment was conducted on 5 December 2012 in conjunction with the 4th quarterly drill for 2012 of the *Sara*.

The equipment was found to be complete and in good condition, according to the delivery document (and relevant pack list of the supplier) signed by Aegean Bunkers at Sea representative. It was also noted that the equipment delivered is in line with the Specific Contract No. 2, implementing the Framework Contract No. 11/EMSA/ OP/ 02/ 2011-2 with AllMaritim AS.

The vessel *Sara* was pre-fitted for installation and operating of the new skimmer system. It was noted that the pre-fitting works were done according to the contractor's bid with some small changes related to the initially planned re-location of the Yokohama fenders. With Class (BV) agreement, the skimmer skid was installed on the top of the existing fender foundations.

During the drill performance, the functionality test of NorMar skimmer system was

carried out as follows:

- Deployment and operating of the skimmer with brush/disc cassette;
- Testing thrusters, brushes and the pump;
- Change of Skimmer heads;
- Deployment and operating of the skimmer with weir cassette;
- Testing thrusters and pumps;
- Changing the skimmer unit to redundant hydraulic power supply (from the power pack to the vessel hydraulic system);
- Deployment and operating of the skimmer with brush/disc cassette using the ship's hydraulics;
- Deployment and operating of the skimmer with weir cassette using the ship's hydraulics.

The test showed that:

- The vessel had been properly pre-fitted for the installation and operation of the NorMar 250 high-capacity skimmer system. It was noted that all the pre-fitting works were in line with the contractor's offer and the provisions of the Contract Amendment;
- The equipment delivered (under Framework Contract No. 11/EMSA/ OP/ 02/ 2011-2) was in accordance with to the Specific Contract No. 2 with AllMaritim;
- The level of training of the crew in operating the skimmer system was found to be satisfactory;
- The NorMar 250 high-capacity skimmer system worked properly. All the functions of the skimmer were operational using both the power pack and the vessel hydraulic system (as back-up);
- The NorMar 250 TI skimmer system is certified for Ex-Class 2, as per Contract requirements. It is placed on the main deck of the Sara within hazardous area 1, as the vessel is certified to carry oil products with a flash point below 60°C. In order to keep the classification of the vessel, the operation of the skimmer unit can only be performed through the use of the control stand due to the lack of certification for Ex-Class 1 of the electrical components of the skimmer (flow meter, electrical cables, solenoids and remote control). Nevertheless, the electrical installation was successfully tested during the commissioning of the equipment when the vessel was gas-free. This issue will not hamper the operation of the system, nor its performance parameters;
- In addition it was noted that in case of failure of the vessel hydraulic system (that normally provides the required hydraulic power for the existing oil pollution response equipment on board the Sara), the new power pack of the NorMar system can operate one of the sweeping arms or the oil boom and skimmer.

Following the successful acceptance an acceptance Note for the improvement project on board the Sara was issued effective from 6 December 2012.

Acceptance of the high capacity skimmer on board the Aktea

The Agency implemented an improvement project with the contractor EPE. The purpose of this project was the upgrade of the existing pollution response capacity of the contracted vessel *Aktea OSRV* (based in Piraeus, Greece) through the installation of one Normar 250 TI high-capacity skimmer.

The Acceptance Test of the new oil pollution response equipment on-board the *Aktea OSRV* off Limassol was carried out on 24 September 2012.

The test proved that:

- The vessel was found properly pre-fitted for the installation and operation of the NorMar 250 TI high-capacity skimmer system. It was noted that all the pre-fitting works were in line with the contractor's offer and the provisions of the Contract Amendment;
- The equipment delivered (under Framework Contract No. N.11/EMSA/OP/02/2011-2 – Lot 2 Off-shore "high-capacity" skimmer) was in accordance with to the Specific Contract No. 1 with AllMaritim. The only item missing was the spare parts;
- The level of training of the crew in operating the skimmer system was found good;
- The Normar 250 TI high-capacity skimmer system worked properly. All the functions of the skimmer were operational. The capacity tests were successfully performed;
- The Normar 250 TI skimmer system is certified for Ex-Class 2, as per Contract requirements. It is placed on the main deck of the *Aktea OSRV* within hazardous area 1, as the vessel is certified to carry oil products with a flash point below 60°C. In order to keep the classification of the vessel, the operation of the skimmer unit can only be performed through the use of hydraulic power due to the lack of certification for Ex-Class 1 of the electrical components of the skimmer (flow meter, electrical cables, solenoids, remote control);
- Nevertheless, the electrical installation was successfully tested during the commissioning of the equipment when the vessel was gas-free. This issue will not hamper the operation of the system neither its performance parameters;
- The existing oil pollution response equipment on board the Aktea (Foilex skimmer and boom system) can be operated by the new power pack of the Normar system;

Following the successful acceptance an Acceptance Note for the improvement project on board the Aktea OSRV was issued effective from 25 September 2012.

Acceptance of the rigid sweeping arms on board the *Forth Fisher*, *Mersey Fisher* and *Galway Fisher*

The James Fisher Everard arrangement was upgraded with an additional set of sweeping arms (Koseq 15 m rigid sweeping arms). The Acceptance Test of the technical upgrade was observed by EMSA on 8 June 2012 on-board the *Forth Fisher*, in conjunction with the 3rd drill for 2012⁷. The Completion Reports (related to all three contracted vessels) were finalised during the commissioning and the Acceptance Test and were submitted to the Agency.

The contracted vessels *Forth Fisher, Mersey Fisher* and *Galway Fisher* were originally pre-fitted for installation and operation of the new Koseq sweeping arm system. The contractor fulfilled all agreed pre-fitting works related to one additional flatbed trailer for transportation of the drip trays, lay flat bunker transfer hoses, drip trays, twist locks and stainless steel bolts for installation of the new equipment.

It was noted that the equipment delivered (under the Framework Contract No. 11/EMSA/OP/02/2011-1) was according to the pack list of the supplier as well as in line with the Specific Contract No. 1 with Koseq. The operation of the new equipment was performed in a safe and professional way. During the installation and commissioning of the equipment, as well as during the Acceptance Test, the crew was trained by the Koseq team. Koseq representatives also worked closely with the personnel of the Cork Dockyard giving them advice as to best practices for mobilisation and loading of the equipment.

The Acceptance Test of the new sweeping arm system was performed well. No shortcomings were observed during the Test. All the equipment was available and worked properly. The pump capacity tests carried out showed that the capacity reached is in line with pump-name plates. It was noted that the brush skimmer head can be stowed and operated on the starboard side sweeping arm if some minor modifications to the vessel's handrails are made. The representative of JFE agreed that this is a feasible approach. In order to fit and operate the brush skimmer head in portside sweeping arm, a major modification to the vessel's pipe structure or a new design of the arm would be needed. Within the framework of this improvement project, such extensive modifications were not considered feasible.

The same situation was expected on the *Galway Fisher* - sister ship of the *Forth Fisher*. The acceptance trial on-board the *Mersey Fisher* was performed by the contractor without EMSA attendance. The following results were reported by the contractor: The acceptance trial with the sweeping arm system with weir skimmer heads on both (portside and starboard side) arms was performed satisfactorily. All the equipment was operational and worked properly.

⁷ According to the Contract, the contractor should perform at least two oil pollution response equipment drills with each vessel per year (6 in total).

- The equipment was installed and operated on the starboard side sweeping arm satisfactorily;
- The foldable end of the portside Koseq arm cannot be opened when the arm is stowed in its transport position as it overlaps with the power pack structure. The foldable end can be opened only when the arm is fully lifted by the Koseq crane before returning the arm to its stowed position;
- The equipment can be stowed and operated satisfactorily on the portside sweeping arm if the brush skimmer head is fit to the arm ashore, before the equipment to be loaded and installed on-board.

The final conclusions of the acceptance test on board the Forth Fisher and Mersey Fisher were as follows:

- All three James Fisher Everard vessels can operate the new equipment using the weir skimmer heads installed on both starboard side and portside sweeping arms.
- The *Forth Fisher* and *Galway Fisher* (sister ship) can operate the new equipment using the brush skimmer head installed on starboard side sweeping arm after some minor modifications to the vessel handrails.
- The *Forth Fisher* and *Galway Fisher* (sister ship) can operate the new equipment using the brush skimmer head installed on portside sweeping arm only after some modification to the design of the sweeping arm foldable end.
- The *Mersey Fisher* can operate the new equipment using the brush skimmer head installed on both (portside and starboard side sweeping) arms if the brush skimmer heads are installed in the arms before the equipment to be loaded.
- All three James Fisher Everard vessels can operate the new equipment using the weir skimmer heads installed on both starboard side and portside sweeping arms.
- The *Mersey Fisher* can operate the new equipment using the brush skimmer heads installed on both starboard side and portside sweeping arms.
- The *Forth Fisher* and *Galway Fisher* (sister ship) can operate the new equipment using the brush skimmer head installed on starboard side sweeping arm only if some minor modifications to the vessel's handrails are made.

The Acceptance Note for the improvement project on board the *Galway Fisher*, *Mersey Fisher and Forth Fisher* was issued effective from 23 June 2012.

Acceptance test for the Arctic skimmer for the Kontio

In accordance with Amendment No. 3 to the Contract, the pollution response capacity of the *Kontio* was upgraded with an additional skimmer (Lamor arctic skimmer LAS 125).

The Acceptance Test of the new equipment was conducted on 29 October 2012 in conjunction with the 4th quarterly drill for 2012 of the icebreaker *Kontio*.

The Acceptance Test was attended by representatives of the equipment manufacturer (Lamor) and a surveyor from Germanischer Lloyd.

The equipment was found to be complete and in good condition, according to the List of the Delivery/Received Equipment, signed between Arctia Icebreaking and OW Tankers.

It was noted that the "pre-fitting works" were done according to the agreed technical specifications. This mainly entailed transportation of the equipment (including completion with the tailor-made flat-rack container to store the skimmer) but without modification to the vessel.

The flat rack container (for accommodation of the arctic skimmer) was delivered by Lamor on the day of the Acceptance Test. The equipment was found to be complete and in good condition, according to the Delivery Statement, signed by EMSA, Arctia Icebreaking and Lamor (enclosed to this Technical Report as Appendix 2).

The new 20 ft. flat-rack container with the arctic skimmer was loaded and installed aft on the deck (in the same place as the existing brush skimmer).

The arctic skimmer was deployed twice – once with the floats installed and once without.

The skimmer was operated by the vessel's telescopic crane. A pump test of the skimmer's pump was carried out. The performance of both the equipment and the crew was considered as satisfactorily.

The test proved that:

- The vessel was found ready to receive the arctic skimmer according to the contractor's offer and the provisions of the Contract Amendment;
- The equipment delivered (arctic skimmer and the flat-rack container) was in accordance with the relevant delivery statements;
- The level of training of the crew in operating the new skimmer was found to be satisfactorily;
- The arctic skimmer worked properly. The pump capacity test was successfully performed.

The Completion Report was received on 28 January and approved on the same day. Consequently, the Acceptance Note for this improvement project was issued effective from 28 January 2013.



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ANNEX 4: Summary of the Quarterly Drills carried out in 2012

The quarterly drills carried out in 2012 are summarised in Tables 3 and 4 below.

Area/Contractor/Port	Vessel	N°	Date	Comments	
Baltic Sea	OW Copenhagen	3	18/09/12	Vessel accepted on 12 Jul	
OW Tankers A/S Copenhagen	OW Copenhagen	4	15/11/12	2012. 2 drills required in 2012 No drill was attended b EMSA	
	Kentin	1	23/03/12	 4 drills required annually. A drills accepted. 2 drills were attended b EMSA. 	
Arotia Laphropking Ltd		2	23/05/12*		
Arctia Icebreaking Ltd Helsinki/Oulu	Kontio	3	28/08/12		
		4	29/10/12*		
North Co.	DC Vlaanderen	1	28/02/12		
North Sea	Interballast III	2	28/06/12	4 drills required annually. All drills accepted.	
DC Industrial Ltd	DC Vlaanderen	3	27/06/12	1 drill was attended by	
Ostend	Interballast III	4	15/10/12*	- EMSA.	
	Mersey Fisher	1	07/01/12		
Atlantic Coast James Fisher Everard Ltd Cobh	Galway Fisher	2	17/04/12	2 drills per vessel annual are required (6 in total). All drills accepted. 2 dri were attended by EMSA. Galway Fisher – 2 drills Mersey Fisher – 2 drills Forth Fisher – 2 drills.	
	Forth Fisher	3	08/06/12*		
	Mersey Fisher	4	23/06/12		
	Galway Fisher	5	26/09/12*		
	Forth Fisher	6	23/11/12		
		1	22/02/12*	4 drills required annually. A drills accepted. 1 drill wa attended by EMSA.	
Lamor Corporation A.B.		2	08/05/12		
Sines	Bahia Tres	3	07/08/12		
		4	24/10/12		
		1	20/03/12*	 4 drills required annually. All drills accepted. 2 drills were attended b EMSA. 	
Assess Durkers at Cas NV	Sara	2	28/05/12		
Aegean Bunkers at Sea NV Portland		3	11/09/12		
		4	05/12/12*		
	losa Ria de Vigo	1	22/03/12	4 drills required annually. - 1 drill was attended b EMSA. All drills accepted.	
Remolcadores Nosa		2	06/06/12*		
Terra S.A.		3	12/09/12		
Vigo		4	15//11/12		
7 Contractors	10 Vessels	28 Drills	*9 Drills attended	All required drills accepted	

Table 1. Quarterly drills performed in 2012 (North & West Europe)⁸

⁸ * attended by EMSA

Area/Contractor/Port	Vessel	N°	Date	Comments
Mediterranean Sea Mureoil S.A. Algeciras	Bahia Uno	1	16/02/12*	4 drills required annually. All drills accepted. 1 drill was attended b EMSA.
		2	06/06/12	
		3	25/07/12	
		4	18/10/12	_
Naviera Altube	Monte Anaga	3	4/09/12*	2 drills required in 2012. 1 drill was attended by EMSA. All drills accepted.
Algeciras		4	6/11/2012	
Tankship Management Ltd	Balluta Bay	3	11/09/12	2 drills required in 2012. 1 drill was attended by EMSA.
Malta		4	29/11/12	All drills accepted.
		1	26/03/12	4 drills required annually.
Tankship Management Ltd		2	11/06/12	 All drills accepted. No drill was attended by
La Spezia	Salina Bay	3	18/09/12	EMSA. Contract was terminated or 30/09/12
Falzon Station Services Ltd	Santa Maria	1	02/03/12	4 drills required annually.
		2	16/05/12*	All drills accepted.
Malta		3	11/09/12	1 drill was attended b EMSA.
		4	29/11/11	
		1	22/02/12	 4 drills required annually. All drills accepted. 2 drills were attended b EMSA.
	Aktea OSRV	2	05/06/12*	
Environmental Protection	AKIEA USRV	3	24/09/12*	
Engineering S.A. Piraeus		4	17/11/12	
Piraeus		5	05/06/12*	2 drills required annually. All drills accepted.
	Aegis I	6	17/11/12	1 drill was attended b EMSA.
	Alexandria	1	06/03/12	4 drills required annually .
Petronav Ship Management Ltd		2	03/05/12*	All drills accepted. 1 drill was attended b EMSA.
Limassol		3	24/09/12	
		4	20/11/12	
	GSP Orion	1	15/02/12	 4 drills required annually. All drills accepted. 1 drill was attended b EMSA.
Black Sea		2	23/05/12*	
Grup Servicii Petroliere S.A. Constanta		3	01/10/12	
		4	27/12/12	
7 Contractors	8 Vessels	29 Drills	*8 Drills attended	All drills accepted

Table 2.	Quarterly drills performed in 2012 (South & East Europ	e)°
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⁹ * indicates attended drill



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ANNEX 5: Overview of the Operational Exercises 2012

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The Operational Exercises at Sea carried out in 2012 are summarised in Table 5 below.

Operational Exercises carried out in 2012

Exercise Name	Date, Location	Participating Parties	EMSA vessels
XAVEGA 2012	09/05/2012 Sesimbra	Portugal, EMSA	Bahia Tres
SAR-POL 2012	24/05/12 Constanta, Romania	Romania, EMSA	GSP Orion
BONNEX 2012	31/05/12 Helgoland, Germany	Germany, France, Denmark, Netherlands, Sweden, EMSA	Sara
ORSEC 44 2012	20/06/12 Saint Nazaire, France	France, EMSA	Mersey Fisher
NIREAS 2012	06/06/12 Athens, Greece	Greece, EMSA	Aktea OSRV and Aegis I
POLEX 2012	28/07/12 Ostend, Belgium	Belgium, Netherlands, EMSA	DC Vlaanderen and Interballast III
BALEX DELTA 2012	29/08/12 Gulf of Finland	Finland, Denmark, Estonia, Germany, Latvia, Lithuania, Sweden, EMSA	Kontio
COPENHAGEN AGREEMENT 2012	12/09/12 Frederikshavn, Denmark	Denmark, Sweden, EMSA	OW Copenhagen
MALTEX 2012	14/09/12 La Valletta, Malta	Malta, EMSA	Santa Maria and Balluta Bay
POLGER 2012	20/09/12 Swinoujscie, Poland	Germany, Poland, EMSA	OW Copenhagen
NIRIIS 2012	25/09/12 Limassol, Cyprus	Cyprus, EMSA,	Aktea OSRV and Alexandria
ORSEC LNG 2012	18/10/12 France Cherbourg, France	France, EMSA	Sara
12 Operational Exercises	12 Exercise days (16 Vessel days)	16 EMSA Counterparts	13 Different EMSA SOSRVs

Exercise XÁVEGA 2012 (Atlantic coast)

On 9 May 2012, the at-sea pollution response exercise 'XÁVEGA 2012' was held off Sesimbra, 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 at the operational level of the Agency's contracted vessel *Bahia Tres*, based in Sines, Portugal, with the Portuguese vessels.

The exercise scenario simulated the collision between two merchant ships in the vicinity of the Port of Sesimbra. As a result of the accident, one of the vessels was adrift, with significant damage to her hull. A spillage of about 900 tonnes of intermediate fuel oil (IFO) 180 and 20 tonnes of lubricants occurred. Following the activation of the relevant Portuguese Contingency Plan and request for assistance to MIC/EMSA, appropriate oil recovery operations were undertaken as well as a shoreline clean-up.



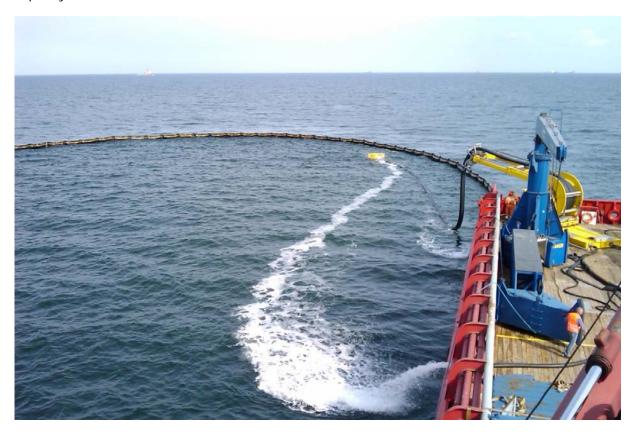
Simulation of oil recovery with skimmer

The XÁVEGA 2012 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 SAR-POL 2012 (Black Sea)

The Romanian annual at-sea pollution response exercise 'SAR-POL 2012' was organised and conducted by the Romanian Naval Authority (RNA) on 24 May in the vicinity of Constanta, Romania. The purpose of the exercise was to test the national capacities and international assistance for responding to oil spills. EMSA participated in this exercise with the contracted vessel *GSP Orion* based in Constanta.

The scenario included an oil spill of Ural crude caused by a cracked pipeline from the Midia Marine Terminal. The role assigned to the EMSA vessel in the exercise was to simulate mechanical oil recovery using the secondary system, offshore boom and high-capacity skimmer.



GSP Orion deploying "Trans-rec" high-capacity skimmer to the apex of the boom J-formation

The objectives of the exercise were achieved. EMSA's participation fulfilled the anticipated objectives in terms of both efficiency and coordination and demonstrated a high level of professionalism. It was also a good opportunity to practise the operational capabilities of the contracted vessel *GSP Orion* and to reinforce the cooperation with the Romanian national response units.

Exercise BONNEX 2012 (North Sea)

On 31 May 2012, the international at-sea marine pollution response exercise "BONNEX 2012" was held in the vicinity of the Island of Helgoland, Germany. The exercise was carried out within the framework of Bonn Agreement (Belgium, Denmark, France, Germany, Ireland, Netherlands, Norway, Sweden and the United Kingdom).

The exercise was organised by the Central Command for Maritime Emergencies, CCME (Havariekommando: Gemeinsame Einrichtung des Bundes und der Küstenländer), Germany.

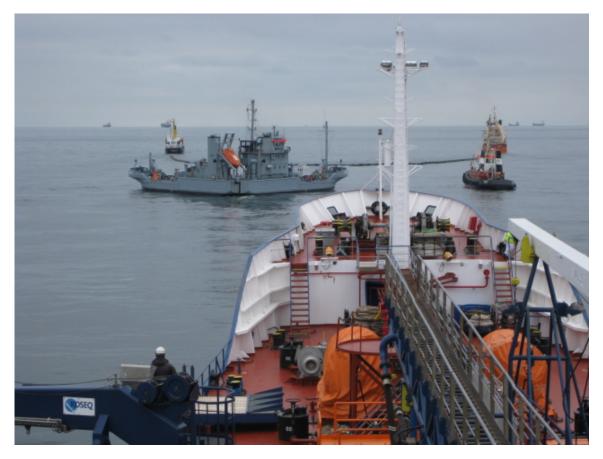
The objectives of this exercise were to test the response time and capability of the OTSOPA Contracting Parties to deal with oil pollution at-sea.

EMSA participated with the *Sara*, contracted from Aegean Bunkers at Sea, based in Portland, UK. Vessels from Germany, France, Denmark, Netherlands and Sweden also took part in the exercise.

The objective for this exercise related to the participation of the *Sara* was actual oil recovery exercise at sea deploying response equipment.

The exercise scenario simulated a collision between the outbound container vessel *MS Tivoli* and inbound trawler *MS Seehecht* in the vicinity of the island of Helgoland. *MS Tivoli* reported to VTS German Bight Traffic a leakage from the starboard storage tank with a capacity of 2,500 m³ heavy fuel oil (HFO). The CCME was in charge of the counter pollution operation and the Bonn Plan was activated.

The BONNEX 2012 Exercise was a positive experience for all the participants. The coordination between the different units was positively tested. The communication between all participating units ran smoothly. *Sara* fulfilled the role assigned by the Member State (Germany) organising this exercise and also met the expectations of the Agency.



Eversand and Sara following the open U formation

Exercise ORSEC 44 2012

On 20 June 2012 the at-sea marine pollution response exercise 'ORSEC 44' was held off Saint-Nazaire, France. The operational exercise was organised by the Prefecture Maritime de l'Atlantique, France. The objective of the exercise was to test the National/Prefecture emergency response procedures and to test/train their staff as well as the cooperation between response units including EMSA vessels. EMSA participated with the *Mersey Fisher*, contracted from James Fisher Everard and based in Cobh, Ireland.

The objective for this exercise related to the participation of the *Mersey Fisher* was actual oil recovery exercise at sea deploying response equipment.

The following exercise scenario was executed:

On 19 June, a simulated collision between *MV Ciudad de Cadiz* and another vessel occurred in the waiting area of Saint-Nazaire harbour. The crisis response management centre sent the evaluation and intervention team on board to help the crew to deal with the crisis (there was a water leak near the engine room). The disabled vessel was towed by a private tug to the Saint-Nazaire harbour. During this operation, aircraft detected marine pollution.

The participating vessels were the EMSA Contracted vessel *Mersey Fisher*, *BSAD Alcyon*, 1 tug, 4 fishing vessels and a large number of French fishing boats.

The main benefit of the exercise for the Agency was to strengthen the integration of EMSA vessels at the operational level with French ships and their command structure. *Mersey Fisher* fulfilled the role assigned by the Member State organising this exercise (France) and also met the expectations of the Agency.

The rice husks, used to simulate oil spills, were noted to be more appropriate and suitable, (compared with popcorn, used for the same purpose), due to their colour and visibility even after several hours floating on the sea surface.

Exercise NIREAS 2012 (Aegean Sea)

The joint EMSA – Greece antipollution Exercise 'NIREAS 2012' was organised within the context of cooperation in the field of pollution response between the Hellenic Coast Guard and the Agency. This exercise is conducted every two years by the Greek authorities.

The exercise, conducted on 6 June in the vicinity of Athens, aimed at testing the National Oil Spill Contingency Plan and in particular the procedure for requesting/receiving international assistance in case of a large oil spill. The purpose of the exercise was also to verify the level of cooperation and functionality of the existing contingency planning arrangements.

Two EMSA contracted vessels – the tanker *Aktea OSRV* and her back-up vessel, the offshore supply vessel *Aegis I*, both based in Piraeus, took part in the exercise.



The Aktea OSRV with the sweeping arms deployed during Nireas 2012 exercise

The exercise was a good occasion to practise the operational capabilities of the EMSA contracted vessels in the Aegean Sea and to strengthen the cooperation with the national response units.

Exercise POLEX 2012 (North Sea)

The exercise 'POLEX 2012,' hosted by Belgium, was carried out on 28 June 2012 in the waters of Gootebank near Ostend.

The aim of the exercise was to strengthen the integration at the operational level of EMSA contracted vessels with the Belgian and Dutch marine pollution response mechanisms. Two of EMSA's contracted vessels (dredgers): *DC Vlaanderen 3000* and *Interballast III* participated in the exercise, together with two Dutch Coast Guard vessels: *Frans Naerebout* and *Arca;* one tendered boat *Geo Surveyor;* two Belgian tugs: *Zeehond* and *Zeetijger* Belgian surveillance aircrafts.

In general, the exercise programme included testing the "U" formation of the boom towed by the Belgian tugs and followed by the *DC Vlaanderen, Interballast III* and *Arca* skimming oil with their sweeping arms. The exercise was coordinated by the Belgian Onscene Commander. The exercise programme was completed successfully.

During the exercise, the EMSA contracted vessels fulfilled the role assigned by the Member State (Belgium) in charge of this event and also met the expectations of the Agency.



DC Vlaanderen 3000 and Interballast III following the "U" formation

BALEX DELTA 2012

On 29 August 2012, the international at-sea oil spill response exercise BALEX DELTA 2012 was held in the Gulf of Finland. The exercise was carried out within the framework of the Helsinki Convention (the contracting parties are Denmark, Estonia, EU, Finland, Germany, Latvia, Lithuania, Poland, Sweden and Russia).

The exercise was organised by the Finnish Environment Institute (SYKE) with the financial support of the EU Commission (DG ECHO). The aim of the exercise was to test the response time and capability of the HELCOM Contracting Parties and participating units to deal with oil pollution at sea.

EMSA participated with the icebreaker *Kontio*, as contracted from Arctia Icebreaking Oy, based in Helsinki, Finland.

The main advantage of this exercise was for the Agency to strengthen the integration of EMSA vessels at the operational level with MS ships and the command structure of several Member States. Units from Denmark, Estonia, Finland, Germany, Latvia, Lithuania and Sweden took part in the exercise. Russia did not attend.

In addition, it should also be pointed out that, within the framework of the exercise, the Monitoring and Information Centre (MIC) sent an EU Civil Protection Team (EU CP). There was also a Balex Delta Exercise Evaluation Team (EET). Accordingly, there was one EMSA Liaison Officer on-board the *Kontio* for the purposes of the EU CP and one EMSA Officer was a member of the Exercise Evaluation Team. This was the first occasion where EMSA had been invited to be a member of the EET.

The Exercise scenario was as follows:

On 27 August 2012, two vessels collided in the Gulf of Finland. The accident happened in the Finnish response zone at open sea. Both vessels were travelling westbound in the Gulf of Finland, tanker 'POOR LUCK' and a ROPAX TUNARI. TUNARI was travelling faster and thus decided to overtake the POOR LUCK. Just as TUNARI was passing the tanker, an unexpected total blackout occurred that causes the loss of TUNARI's manoeuvrability. TUNARI's rudder tilted which caused a sudden change in the vessel's direction and TUNARI collided with the side of the POOR LUCK resulting in the leakage of oil from one of the cargo tanks containing approximately 15 000 tons of REBCO crude. As a consequence a large, 8 km long and 1 km wide oil slick started to drift towards Helsinki.

The vessel crews checked the damage to their respective ships and the situation was stable with no risk of further damage. The M/T POOR LUCK was towed and anchored to a location in the exercise area where the damages were examined. M/T POOR LUCK had a total of 100,000 tons of REBCO crude oil as cargo, while TUNARI did not have any marine pollutants as cargo. Furthermore, as TUNARI did not have any leaks it was accordingly allowed to sail on its own to the repair docks.

Apart from the EMSA vessel, there were 10 vessels from Finland, 2 from Denmark and 1 from each of Germany, Sweden, Latvia, Lithuania and Estonia.

The participants were informed of the exercise scenario, response plan, locations and strike teams created. At 08:45 LT *Kontio* arrived at the initial rendezvous position. The

exercise was started at 09:00 LT. Strike team 'Foxtrot' was established by the Supreme Oils Spill Commander (SOSC) with the *Kontio* as the lead ship with 4 Finish oil recovery. *Kontio* was also requested to be on stand-by at this position until the other vessels from the strike team arrived at the position.

At 09:20 LT SOSC instructed the vessels from Foxtrot team to deploy their sweeping arms and to simulate oil recovery between a designated area located between the boom formation and Isosaari Island. The formation was tasked by the SOSC to recover the oil in this relatively large area following the information obtained by the *Kontio'* Oil Slick Detection System, as well as those received from the air surveillance.

This formation was maintained for a long time from 09:30 until 14:40 LT, with a sweeping speed between 0.5 and 1.0 knots. Due to the calm sea, it was possible to keep a very short distance between the vessels (sometimes even below 15-20 m). The good coordination between the masters of all the vessels of this strike team should be highlighted. All manoeuvres were undertaken following the commands of the *Kontio* Master who notified the other vessels well in advance of the forthcoming course changes.

The turf, simulating the oil spill, was observed at 11:30 LT. Following the appropriate manoeuvres, the sweeping course was changed with the result that the strike team collected a significant part of the 'pollutant.' The Master of the *Kontio* reported to the SOSC the quantity of the 'oil' recovered on a regular basis. At 14:40 h the organisers called the end of the exercise.

The BALEX DELTA 2012 Exercise was very well organised. The scenario was realistic taking into account both the current and anticipated vessel traffic in the Gulf of Finland, in particular the trade in Russian crude oil.

The exercise was a positive experience for all the participants. The coordination between the different participating countries and response units was positively tested and the communication between the SOSC and the participating units ran smoothly.

The appearance of the turf, used for simulating oil spill, was not very visible from a long distance compared to some other oil simulating materials e.g. rise husks or popcorn.

Kontio fulfilled the role assigned by the MS (Finland) organising this exercise and also met the expectations of the Agency. The EMSA contracted vessel performed well and crew showed a high level of motivation.



Kontio and other vessels during BALEX DELTA 2012 (Photo SYKE-Kati Tahvonen)

Exercise COPENHAGEN AGREEMENT 2012 (Baltic Sea)

The Admiral Danish Fleet hosted the 'COPENHAGEN AGREEMENT 2012' exercise. The exercise took place on 12 September 2012 in waters of Frederikshavn. EMSA participated in this exercise with *OW Copenhagen* stationed in Copenhagen. EMSA did not send an observer to this exercise. Vessels from Denmark, Norway and Sweden also took part in the exercise.

The scenario for the exercise was an accident between two large tankers engaged in a ship-to-ship operation. The accident resulted in an oil spill of approximately 6,000 tonnes of REPCO on 10 September. The request for assistance was transmitted as a POLREP message and via CECIS.

The EMSA contracted vessel *OW Copenhagen* fulfilled all tasks ordered by the On-scene Commander. The main task of the vessel was to collect oil with the sweeping arm system at the assigned location.

The exercise provided an ideal opportunity to strengthen the integration of EMSA's Network of Stand-by Oil Spill Response Vessels with the Copenhagen Agreement response system. The exercise was completed successfully.

Exercise MALTEX 2012 (Central Mediterranean)

On 12 September, the 'MALTEX 2012' oil spill response exercise, organised by Transport Malta, was conducted off La Valletta, Malta. The *Balluta Bay* and the *Santa Maria* based in Malta and contracted from Tankship and Falzon respectively, took part in this exercise.

The exercise scenario simulated a collision of the tankers *MT Tanker* and *MV Cargo* at 1030 UTC at a location 1.5 miles east of Malta. *MT Tanker's* No 3 and 4 Starboard Wing Cargo Tanks ruptured, and began leaking oil. 250 m³ of oil leaked into the sea immediately, with more oil leaking out gradually. *MT Tanker's* main engine broke down and the vessel requested immediate tug assistance. *MV Cargo* had severe bow damage in the fore peak area. As the vessel was not in immediate danger, it proceeded to a safe place for further assessment of damage.

The *Spinola* and the *Felica* (two Maltese tugboats) deployed 250 m of containment booms in a J-formation, and the *Spinola*'s skimmer was deployed.



The tugs Spinola and the Felica deploying a boom in J-formation

The *Balluta Bay* and the *Santa Maria* were ordered to deploy their sweeping arms and simulate oil recovery in coordination with the other units.

EMSA's vessels performed well during the exercise. The coordination with other units was very good. Overall, the exercise was a good opportunity for the participating units to improve coordination during oil pollution response operations.

Exercise POLGER 2012 (Baltic Sea)

The EMSA contracted vessel *OW Copenhagen* participated in the annual 'POLGER 2012' pollution response exercise at the invitation of the Polish Search and Rescue Service.

The exercise was carried out on 19-20 September in the vicinity of the Port of Swinoujscie and the aim of the exercise was to strengthen the integration at the operational level of the EMSA contracted vessel with the Polish and German marine pollution response mechanisms.

The following vessels participated in the exercise:

Germany:

- *Scharhörn* (storage capacity: 430 m³)
- *Kiel* (storage capacity: 350 m³)

Poland:

- Kapitan Poinc (Search and Rescue multipurpose vessel) (storage capacity: 512 m³);
- Czeslaw II (SAR) (storage capacity: 20 m³);
- Orkan (SAR) (storage capacity: n/a);
- Cyklon (SAR) (storage capacity: n/a);
- *Planeta* (Polish Maritime Administration) (storage capacity: n/a);
- SG (Polish Coast Guard) (storage capacity: n/a);
- Aircraft Bryza (Polish Coast Guard).

EMSA:

• *OW Copenhagen* (storage capacity: 4,487 m³).

The exercise programme tested the two "U" formations of the oil boom towed by:

- 1. Vessels *Orkan* and *Planeta*, followed by the *Kapitan Poinc*, *Scharhörn* and *OW Copenhagen* skimming oil with their sweeping arms.
- 2. Vessels *Cyklon* and *SG*, followed by the *Kiel* and *Czeslaw II* with their skimming systems operating.

At the end of the exercise *OW Copenhagen* was given a task to leave the open "U" formation and to deploy her own oil boom in "J" formation together with the brush skimmer. The task was fulfilled as requested.

The exercise was coordinated by the Polish On-scene Commander on board the Polish Search and Rescue vessel *Kapitan Poinc*.

The exercise scenario was realistic and the manoeuvring of the *OW Copenhagen* with sweeping arms deployed behind the Open-U boom configuration was successfully conducted.



Exercise POLGER 2012 - Open U formation followed by *OW Copenhagen, Scharhörn and Kapitan Poinc*

Exercise NIRIIS 2012 (Eastern Mediterranean)

On 25 October EMSA participated in the oil pollution response exercise 'NIRIIS 2012.' This exercise was organised by the Cyprus Department of Merchant Shipping and conducted off Limassol (Cyprus).

The scenario developed by the organisers included an oil spill incident with instantaneous release of approximately 2,000 tonnes of heavy fuel oil caused after a collision between an oil tanker and a bulk carrier.

The main purpose of the exercise was to train the Member State's command and communication system for pollution response operations, practical use of recovery equipment and cooperation of participating units. This is the second operational exercise organised by Cyprus with the participation of the Agency.

Two EMSA contracted vessels took part in this exercise: the *Alexandria*, contracted from Petronav, based in Limassol, and the *Aktea OSRV*, contracted from Environmental Protection Engineering, based in Piraeus, Greece.



Alexandria following a boom open U-formation with sweeping arms deployed

The exercise provided a good opportunity for the participating units to improve the cooperation during oil pollution response operations in Cyprus. The EMSA contracted vessels *Alexandria* and *Aktea OSRV* performed all the tasks assigned by the On-Scene Commander in an efficient and timely manner.

Exercise ORSEC LNG 2012 (English Channel)

The French Maritime Authority for the English Channel arranged an oil pollution response exercise 'ORSEC LNG 2012.' The exercise took place off Cherbourg in the English Channel on 18 October 2012. The purpose of this exercise was to test the French national pollution response plan.

EMSA, upon invitation, sent the contracted oil pollution response vessel *Sara* stationed in Portland. Four French vessels also participated in the exercise. No EMSA observer was present for this exercise. The exercise scenario was that there was a damaged vessel leaking oil in waters of Cherbourg. During the exercise, oil was simulated with popcorn. The main task for the *Sara* was to deploy the sweeping arm system and collect oil following the boom formation towed by one of the French vessels, *Argonaute*. The EMSA vessel fulfilled all assigned tasks successfully.

The aim of the exercise to strengthen the integration of EMSA vessels at the operational level with French ships and the command structure was achieved.



Popcorn simulating oil

Sara following Argonaute



Network of Stand-by Oil Spill Response Vessels: Drills and Exercises Annual Report 2012

ANNEX 6: Overview of the Notification Exercises 2012

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The Notification Exercises carried out in 2012 are summarised in Table 6 below.

No.	NOTIFICATION EX.	DATE/ HOST COUNTRY	IRC Signed by MS	COMMENT
		08/05/12,		IRC signed by contractor and
1	XAVEGA 2012	Portugal	YES	MS
		31/05/12,		IRC signed by contractor and
2	POLFAC BONN 2012	Germany	YES	MS
	ORSEC POLMAR	20/06/12,		Exercise terminated by MS upon
3	2012	France	NO	receiving vessel availability info.
	FINLAND-BALTIC	26/06/12,		IRC signed by contractor and
4	2012	Finland	YES	MS
		27/08/12,		IRC signed by contractor and
5	BALEX DELTA 2012	Finland	YES	MS
	COPENHAGEN	11/09/12,		IRC signed by contractor and
6	AGREEMENT 2012	Denmark	YES	MS
		19/09/12,		IRC signed by contractor and
7	POLGER 2012	Poland	YES	MS
		17/10/12,		No request for assistance to
8	ORSEC-LNG 2012	France	NO	EMSA from Member State.
		23/05/2012,		IRC signed by contractor and
9	SAR-POL 2012	Romania	YES	MS
		05/06/12,		IRC signed by contractor and
10	NIREAS 2012	Greece	YES	MS
		11/09/12,		IRC signed by contractors (2)
11	MALTEX 2012	Malta	YES	and MS
		25/09/12,		IRC signed by contractor and
12	NIRIIS 2012	Cyprus	YES	MS(2)
	SASEMAR	14/11/12		IRC signed by contractors (3)
13	GIBRALTAR 2012	Gibraltar	YES	and MS
	13		15	

Notification exercises have proven to be very useful. They provide valuable experience to all participants and allow EMSA to identify deficiencies and bottlenecks in the existing alert procedures in emergency situations. The exercise also enables EMSA to check how the Member State performs its role.

XAVEGA 2012

On 9 May 2012 the at-sea marine pollution response exercise 'Xávega 2012' was held off Sesimbra, Portugal. The exercise was organised by the Portuguese National Maritime Authority (Autoridade Marítima Nacional-DGAM). The operational exercise was preceded by a notification (alert) exercise involving the requesting MS (Portugal), EMSA and the EU co-operation civil protection mechanism (MIC). The Notification Exercise aimed at testing the agreed emergency and notification procedures for the area of the Atlantic; specifically the mobilisation of the *Bahia Tres* upon request by Portugal (via CECIS), and the signature of the relevant Incident Response Contract between the Portugal Authorities and EMSA's contractor, Lamor Corporation A.B.

The exercise scenario simulated a collision between two merchant vessels near the Port of Sesimbra in Portugal. One of the vessels suffered serious damage. The collision created a risk of oil pollution. 900 tons of IFO 180, 20 tons of lubricants and 10 tons of hydraulic oil was on board the damaged vessel.

Within the framework of the exercise, international assistance from EMSA's oil spill response vessel *Bahia Tres* (stationed in Sines, Portugal), through the signature of an Incident Response Contract between the Portuguese Authorities and Lamor Corporation A.B., was triggered.

The Incident Response Contract was signed by the contractor and the Member State in less than four and half hours from the formal request for assistance which is considered as acceptable.

The Notification exercise presented an opportunity to run through the agreed emergency and notification procedures. The lines of reporting and of requesting and providing assistance between EMSA, MIC, a single MS and the Agency's contractor (Lamor Corporation A.B.) were put to the test.

POLFAC BONN 2012

At-sea marine pollution response exercise BONNEX 2012 was held in the vicinity of the island of Helgoland, Germany on 31 May 2012. In conjunction with the at-sea exercise, a Notification (Alert) Exercise under the BONN Agreement was held on 30-31 of May. This Notification exercise was organised by the German Authorities (Central Command for Maritime Emergencies Germany, Maritime Emergency Reporting and Assessment Center (CCME)).

The aim of this exercise was to evaluate the agreed emergency and notification procedures, including EU co-operation for pollution in German waters. Accordingly, the lines for reporting, requesting and providing assistance between MIC, EMSA and EMSA's contractor operating in this area (Aegean Bunkers at Sea NV) were tested.

The exercise scenario simulated a collision between the outbound container vessel *MS Tivoli* and the inbound trawler *MS Seehecht* in the vicinity of the island of Helgoland. MS Tivoli reported to VTS German Bight Traffic a leakage from the starboard storage tank $n^{\circ}3$ with a capacity of 2,500 m³ HFO.

Following the request for assistance from Germany (via MIC, using fax), the Agency contracted vessel *Sara*, operating in the Atlantic/Channel, was mobilised.

The Exercise was successfully concluded with the signature of the Incident Response Contract between the CCME and the EMSA contractor, Aegean Bunkers at Sea NV (ABAS), although the time taken was more than would ideally be the case. The execution of this exercise tends to indicate that fax, e-mail and phone are perhaps less reliable for notification exercises than CECIS and the use of the latter means of communication would certainly have facilitated reporting, requesting and provision of assistance.

ORSEC POLMAR 2012

At-sea marine pollution response exercise ORSEC POLMAR 2012 was held in the vicinity of Saint-Nazaire harbour, France, on 19-20 June 2012. In conjunction with the at-sea exercise, a Notification (Alert) Exercise was held on 20 June. This Notification exercise was organised by the French Authorities Centre Opérationnel de Gestion Interministérielle des Crises (COGIC) in conjunction with the Préfecture Maritime de l'Atlantique.

The aim of this exercise was to evaluate the agreed emergency and notification procedures, including EU co-operation for pollution in French waters. Accordingly, the lines for reporting, requesting and providing assistance between MIC, EMSA and EMSA's contractor operating in this area, James Fisher Everard Limited, were tested.

The exercise scenario simulated a collision between *M/V CIUDAD DE CADIZ* and another vessel in the waiting area of Saint-Nazaire harbour. The crisis response management sent on board the evaluation and intervention team to help the crew to deal with the crisis.

The Centre Opérationnel de Gestion Interministérielle des Crises (COGIC) in conjunction with the Préfecture Maritime de l'Atlantique was placed in charge of the counter pollution operation. Following the request for assistance from France (via the MIC using e-mail as opposed to CECIS), the EMSA vessel *Mersey Fisher*, operating out of Cobh, Ireland, was mobilised.

Upon receiving the information concerning the availability of the EMSA contracted vessel, the Exercise was concluded by France, i.e. before signature of the IRC. The Member State seemed to believe that once the vessel had been proposed by EMSA, the exercise was complete and there was no need for further action. The mobilisation procedure was conducted without a positive result as the Member State concluded the exercise prior to confirming their selection of the vessel proposed. Given this situation, the IRC was evidently not sent to the contractor for signature. During the Vessel User Group, EMSA should re-iterate the importance of the signature of the IRC by the Member State.

The execution of this exercise tends to indicate that fax and e-mail are perhaps less reliable for notification exercises than CECIS and the use of the latter means of communication would certainly have facilitated reporting, requesting and provision of assistance.

FINLAND-BALTIC 2012

On 26 June 2012 Unit C.1 carried out a Notification (alert) Exercise for the area of the Gulf of Finland. This Exercise was organised by the Finnish Environment Institute (SYKE). This Notification Exercise aimed at testing the agreed emergency and notification procedures for the mobilisation of the icebreaker *Kontio* upon the request by Finland.

This Exercise began with a marine pollution accident scenario during the morning of 26th June and became a joint marine pollution/civil protection exercise in the afternoon of the same day.

The affected Member State (Finland) launched the alert using CECIS and requested the assistance of 10 oil pollution response vessels, 10 km of heavy duty booms, and 5 experts. Countries such as Sweden, Norway, Germany, Lithuania, Romania, Ireland, Poland, Denmark and Croatia participated in this desk-top exercise and offered their assistance.

The exercise scenario simulated a collision in the Gulf of Finland, between the oil tanker *'TUHNU'* with 100,000 tons of REBCO crude oil as cargo and a bulk carrier *'JOIKO'* with 5,000 tons of ammonium nitrate. Following the collision, the tanker started to leak oil at a rate of approximately 5,000 tonnes/hr.

The Agency replied to the alert and offered the icebreaker *Kontio IB*. The Member State was also reminded by EMSA about the possibility of activating the MAR-ICE network and/or request for CleanSea Net images. The MAR-ICE form was uploaded in CECIS so that the Member State could easily access it and the MAR-ICE network was activated by the Member State through CEDRE.

The Exercise was successfully concluded with the signature of the Incident Response Contract between the Finnish Environment Institute and EMSA contractor, Arctia Icebreaking Ltd. The duration of the exercise was found to be above the average of previous notification exercises The Member State duty officer was unaware that the IRC had to be signed and the Exercise was 'pre-closed' in CECIS after the EMSA offer has been accepted. A similar situation was observed in the BONNEX Notification Exercise. The Notification Exercise was a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Finland.

BALEX DELTA 2012

At-sea marine pollution response exercise BALEX DELTA 2012 was held in the vicinity of the Gulf of Finland on 29 August 2012. In conjunction with the at-sea exercise, a Notification exercise under the HELCOM Agreement was held on 27th of August and organised by the Finnish Authorities, namely the Ministry of the Environment: Finish Environment Institute (SKYE).

The aim of this exercise was to evaluate the agreed emergency and notification procedures, including EU co-operation for pollution in Finnish waters. Accordingly, the

lines for reporting, requesting and providing assistance between MIC, EMSA and EMSA's contractor operating in this area, Arctia Icebreaking Ltd, were tested.

The exercise scenario simulated a collision between the Aframax class tanker 'MT Poor Luck' and a Ro-Ro vessel 'MT Ropax' south east of the Vuosaari harbour in the Gulf of Finland. The Ro-RO vessel's bulbous bow part penetrated through the double hull structure of the tanker resulting in an oil outflow leakage from one of the tanks having approximately 15,000 tons of crude oil, of the Russian blend type. As a consequence, a large, 8km long and a 1km wide oil slick started to drift towards Helsinki.

The Finnish Environment Institute (SKYE) was placed in charge of the counter pollution operation and the HELCOM Plan was activated. The affected Member States (Finland) informed EMSA about the accident and requested assistance. Accordingly *Kontio* was offered to Finland.

The Notification Exercise presented a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Finland. Several other countries (e.g. Sweden, Denmark, UK) participated in this desk-top exercise offering marine/coastal pollution expertise, oil recovery vessels and equipment.

The exercise was successfully conducted with the signature of the Incident Response Contract between SKYE and the EMSA contractor, Arctia Icebreaking Ltd (Arctia) in under four hours and demonstrated a high degree of efficiency.

COPENHAGEN AGREEMENT 2012

On 11 September 2012 a Notification Exercise was organised by the Admiral Danish Fleet within the framework of the Copenhagen Agreement. This event was held in conjunction with the Operational Exercise from 11 to 13 September.

This Notification Exercise aimed at testing the agreed emergency and notification procedures for the mobilisation of the *OW Copenhagen* upon the request by Denmark. The exercise scenario simulated a collision between the tanker '*ERNESSTO*' (IMO 9408475) and tanker '*BRAVO ZULU*' (IMO 929903) during a ship to ship transfer operation. The characteristics of the spill were 6000 of crude oil of- REBCO: Russian Export Blend Crude Oil type, pollution dimensions of 2,5 x 4,5 km85% area cover and Oil Appearance Code: 65% true colour, 10% discontinuous true colour, 5% metallic, 10% rainbow, 10% sheen.

The affected Member State (Denmark) launched the alert (POLWARN) using CECIS and requested the assistance of 6 oil pollution response vessels in total. More precisely the Member State requested 3 oil recovery vessels from Sweden, 2 from Norway and 1 from EMSA.

Accordingly the Agency replied to the alert and offered the *OW Copenhagen* operating in the Southern Baltic Sea. The Member State was also reminded by EMSA about the possibility of activate the MAR-ICE network and/or request for CleanSeaNet images.

The Notification Exercise was a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Denmark. The mobilisation procedure was conducted with a positive result and the Incident Response Contract was signed by both the contractor and the Member State. The duration of the exercise was found to be well below the average of the duration of the previous notification exercises performed under "Unit C.1 Vessel and Expert Mobilisation Procedures".

POLGER 2012

On 19 September 2012 a Notification Exercise was organised by the Polish Maritime Search and Rescue Service. The alert exercise was held in conjunction with the operational at-sea exercise conducted off Swinoujscie, Poland on 20 September. This event was held in the framework of the bilateral agreement between Poland and Germany.

The affected Member State (Poland) launched the alert exercise using CECIS and requested the assistance of oil pollution response vessels with high efficiency oil combating equipment. More precisely, the Member State requested oil recovery vessels from EMSA and Germany.

This Notification Exercise aimed at testing the agreed emergency and notification procedures for the mobilisation of the *OW Copenhagen* upon the request by Poland. The exercise scenario simulated a collision between two vessels (bulk carrier and tanker) in the Southern Baltic Sea near Swinoujscie Harbour, Poland. The tanker was carrying 4500 tons of REBCO blend crude oil. The oil leaked out from the damaged cargo tank with a spill size of 2.0 x 1.0 km.

Following the request for assistance from Poland via CECIS, the EMSA contracted vessel *OW Copenhagen*, operating in the Southern Baltic Sea, was mobilised.

The exercise was concluded with the signature of the Incident Response Contract between the Polish Maritime Search and Rescue Service and EMSA contractor, OW Tankers, however there was a serious delay in the Polish decision to accept the EMSA offer and to mobilise the oil recovery vessel and the time need for Poland to sign the IRC was not in line with EMSA recommended target of max 6 hours.

The Agency's contractor reacted properly and implemented the procedures for the mobilisation of the *OW Copenhagen* correctly. The mobilisation procedure and timing for signing of the IRC form should be discussed during the Vessel User Group meeting. This Notification Exercise presented a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Poland.

ORSEC-LNG 2012

The Agency was invited by the Préfecture maritime de la Manche et de la mer du Nord to take part in the at-sea oil spill response exercise ORSEC LNG 2012 held on 18 October in the Bay of Seine (France). The Agency participated in this exercise with M/T

Sara, contracted from Aegean Bunkers at Sea and based in Portland, UK. It was agreed that on 17 October an Alert (Notification) exercise would be launched by the French Authorities involving MIC and the Agency.

This Notification Exercise aimed at testing the agreed emergency and notification procedures for the mobilisation of the contracted vessels upon the request by MS. Such exercises provide valuable experience to all participants and allow EMSA to identify deficiencies and bottlenecks in the existing alert procedures in emergency situations. The exercise also enables EMSA to check how the Member State performs its role.

As the notification exercise launched by the French Authorities was aimed only to test the internal communications of the national institutions involved, there was no request for assistance from France addressed to EMSA.

The mobilisation procedure and the role of the requesting MS should be further discussed during the Vessel User Group meeting.

SAR-POL 2012

This Exercise was organised by Romanian Maritime Coordination Centre/Romanian Naval Authority and aimed at testing the agreed emergency and notification procedures for the mobilisation of the vessel GSP Orion upon Romanian Maritime Authority request.

The exercise scenario simulated an accident due to the spillage of about 600t Ural blended from an oil pipe stock. The duty officer from Midia Marine Terminal observed a pressure decrease in the pipeline connecting the Single Point Mooring Buoy with the oil tank that was based onshore (from 12 Bar to 3 Bar). Maritime Romanian Coordination Centre (MRCC) was alerted and the National Contingency Plan was activated.

Following the request for assistance from Romania via CECIS, EMSA's contracted vessel *GSP Orion*, operating in the Black Sea area, was mobilised.

The Exercise was successfully concluded with the signature of the Incident Response Contract between the Romanian Maritime Authority and EMSA contractor, Grup Servicii Petroliere (GSP) in under four hours. The duration of the exercise was found to be good and in line with the average of the duration of the previous notification exercises performed under "Unit C.1 Vessel and Expert Mobilisation Procedures."

This Notification Exercise was a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Romania.

NIREAS 2012

On 5 June 2012, Unit C.1 carried out a Notification (alert) Exercise for the area of the Aegean Sea. This Exercise was organised by Hellenic Coast Guard (HCG) - Marine Environment Protection Directorate.

The Notification Exercise aimed at testing the agreed emergency and notification procedures for the mobilisation of the vessel *Aktea OSRV* upon Hellenic Coast Guard request.

This Exercise was held in conjunction with the Operational Exercise organised by the HCG on 6 June with the participation of *Aktea* and *Aegis*.

The exercise scenario simulated a collision between a motor vessel (M/V) and a motor tanker (M/T) due to rough weather conditions. The M/T loaded 4.000 tons of fuel oil IFO 380. There were also 150 m³ of diesel oil and 2 tons of lubricants on board the ship. The Hellenic Coast Guard was alerted and the National Contingency Plan was activated. Following the request for assistance from Greece via CECIS, the EMSA contracted vessel *Aktea OSRV*, operating in the Agean Sea area, was mobilised.

The Exercise was successfully concluded with the signature of the Incident Response Contract between the Hellenic Coast Guard and EMSA contractor, Environmental Protection Engineering S.A. (EPE) in two hours and twenty three minutes was found to be well below the average of the duration of the previous notification exercises performed under 'Unit C.1 Vessel and Expert Mobilisation Procedures.'

The Notification Exercise was a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Greece.

MALTEX 2012

On 11 September 2012 EMSA participated in a Notification (alert) Exercise for the area of the Mediterranean Sea. This Exercise was organised by Transport Malta and was held in conjunction with the at-sea marine pollution response exercise 'MALTEX 2012,' conducted off Malta on 12 September.

The Notification Exercise aimed at testing the agreed emergency and notification procedures for the Mediterranean area, through the mobilisation of the vessels *Balluta Bay* and *Santa Maria* upon Malta Maritime Authority request, along with the signature of the relevant Incident Response Contracts between the Maltese authorities and two EMSA contractors, respectively Tankship Management Ltd and Falzon Group Holdings Limited.

The exercise scenario consisted of an unattached (unknown polluter) oil slick of approximately 330,000 square metres (550 x 600 metres) in Maltese waters. The spill was reported by the *MV Alfa 1*.

The affected Member State (Malta) informed EMSA about the pollution incident and requested via the Common Emergency Communication and Information System (CECIS) the assistance of two EMSA contracted vessels (*Balluta Bay* and *Santa Maria*). The Notification Exercise was a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Malta.

The notification exercise lasted 3 hours and 30 minutes in total. The duration of the exercise was found acceptable and in line with the average of the duration of the previous notification exercises performed under 'Unit C.1 Vessel and Expert Mobilisation Procedures.' It is important that EMSA is kept in copy of all communications between the contractor and the Member State.

NIRIIS 2012

On 24 September 2012, a Notification Exercise was organised by the Cyprus Maritime Authority. The alert exercise was held in conjunction with the operational at-sea exercise 'NIRIIS 2012' conducted off Limassol, Cyprus on 25 - 26 September.

The Notification Exercise was a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Cyprus.

The exercise scenario simulated a collision between two vessels (oil tanker and bulk carrier) southwest of Limassol Bay, Cyprus on 24 September 2012 at 04:00 UTC. The oil leaked out from the damaged cargo tanks was 2000 tons of heavy fuel oil HFO380 and another spillage was expected of around 150-200 tons of heavy fuel oil/hour. The affected Member State (Cyprus) launched the alert exercise using CECIS and requested the assistance of oil pollution response vessels from EMSA.

This Notification Exercise aimed at testing the agreed emergency and notification procedures for the mobilisation of two vessels, contracted from Environmental Protection Engineering and Petronav Ship Management, upon the request by Cyprus. Accordingly, the Agency replied to the alert and offered the vessels M/T *Aktea* and M/T *Alexandria*.

The mobilisation procedure was conducted with a positive result with the signature of the relevant Incident Response Contracts between the Cyprus Maritime Authority and both EMSA contractors (Environmental Protection Engineering and Petronav Ship Management. The total time needed from request for assistance to signature of IRC between Cyprus and the Agency's contractors was respectively 4 hours and 15 minutes for Petronav and 5 hours and 1 minute for EPE. The exercise was efficiently conducted and in line with EMSA recommended target of max 6 hours.

SASEMAR GIBRALTAR 2012

On 14 November 2012 EMSA participated in a Notification (alert) Exercise for the Strait of Gibraltar area. This Exercise was organised by SASEMAR (Spain).

The Notification Exercise aimed at testing the agreed emergency and notification procedures for the Atlantic and Mediterranean areas, through the mobilisation of the vessels Monte Anaga, Bahia Uno and Ria de Vigo upon Spanish Maritime Authority request, along with the signature of the relevant Incident Response Contracts between the Spanish authorities and three EMSA contractors, respectively Naviera Altube, Mureloil and Remolcadores Nosa Terra S.A..

The affected Member State (Spain) informed EMSA about the pollution incident and requested assistance via the Common Emergency Communication and Information System (CECIS). The assistance of three EMSA contracted vessels (Monte Anaga, Bahia Uno and Ria de Vigo) was identified.

The exercise scenario simulated a collision between the VLCC "UTOPIA" (cargo 200.500 tons of crude oil) and the VLCC "EUPHORIA" (cargo 279.00 tons of oil) in the Strait of Gibraltar. The type and quantity of oil spilled was unknown.

The Notification Exercise was a good opportunity to test CECIS for reporting, requesting and providing assistance in cooperation between EMSA and Spain.

The notification exercise lasted in total just over 3 hours and was considered to be very good in relation to previous notification exercises, particularly given that three different contractors were involved.