

Annex VIII of the VAC Enclosed to Procurement Procedure No.

EMSA/CPNEG/1/2017 concerning Service Contracts for stand-by oil spill
recovery vessels

Competitive procedure with negotiations Phase II - Invitation to Tender

Guidelines on Conducting Drills and Exercises for the EMSA Contracted Vessels

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1. Introduction

In the case of a serious marine pollution incident in European waters the European Maritime Safety Agency (EMSA, the Agency) has a legal obligation to provide assistance upon request of the affected Member State in the form of additional response capacity.

Since 2004, in order to fulfil this obligation, the Agency has been developing a system of Standby Oil Recovery Vessels maintaining readiness to respond to oil spills at sea.

EMSA has awarded a number of Vessel Availability Contracts with owners / operators / contractors of commercial vessels to provide oil pollution standby and response services. These vessels are “pre-fitted” and certified for oil recovery operations by an appropriate Classification Society (Recognised Organisation in accordance with Directive 94/57/EC, as amended). Following a spill, and the associated request for assistance from an affected Member State, the best placed vessel ceases its normal commercial activities and is transformed rapidly into a fully operational spill response vessel.

The vessels contracted by EMSA are all equipped with state of the art oil detection, containment, and recovery equipment. They are capable of achieving high recovery rates and have a sizeable onboard storage capacity.

Each vessel is equipped with two sets of the state of the art equipment. The primary oil recovery system is based around the “sweeping arm” concept with an alternative “ocean going boom and skimmer” system also available. In addition some of EMSA contracted vessels are equipped with the weir boom system and dispersant spraying system accompanied with a stockpile of dispersants. The requesting Member State can select which system to use in accordance with the incident characteristics.

However, technical capabilities of the contracted vessels are only one of the elements required to achieve the adequate effectiveness of the response system. Once the technical requirements of the contract are fulfilled, the most important factors determining success of the system are dependent on the skills of the vessel’s crew members to operate and maintain the equipment.

The EMSA contractors are obliged by the Contract to maintain adequate level of readiness to respond to oil spills in European waters. Vessel’s readiness including the condition of the vessel, equipment and operational skills of the crew are evaluated in an on-going manner by EMSA staff. This evaluation is the most important part of the overall contract implementation, successful evaluations triggering stage-payments and influencing decisions on the Contract renewal.

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

Developing and maintaining the operational skills of the crews of the EMSA contracted vessels at the required level is, therefore, of the utmost importance in achieving maximum effectiveness during the drills and exercises conducted by them, and in genuine spill responses.

The purpose of these guidelines is to provide EMSA contractors with information on the best practice for conducting drills and exercises by the EMSA contracted vessels as well as guidance on the drill and exercise evaluation criteria applied by EMSA.

Details regarding the payment of the different costs are available in the Vessel Availability Contract (VAC).

The Guidelines will be subject to update and revision based on the experience gained and consultations with the EMSA Contractors.

2. Role of Drills and Exercises

Drills and Exercises are a very important part of the process of maintaining preparedness to respond to marine pollution incidents. They serve as training opportunities and are as a validating tool for the response system.

Improvements to the current response capability will always be dependent on a well-developed training plan to support response/contingency plans.

The importance of drills and exercises cannot be overstressed. They serve several important purposes including:

- To increase readiness in the event of an actual emergency;
- Provide a means to assess the effectiveness of response plans and response capabilities;
- To test the knowledge and skill of those implementing the plan;
- To serve as a training tool for response personnel;
- To provide an opportunity to practise skills, improve individual and team performance;
- To require participants to collaborate with each other and pre-plan decisions on resources;
- To provide means to educate and involve the public, media, and key community organisations in response planning;
- To validate existing policies and procedures;
- To identify resource needs; and
- To clarify and familiarise personnel with their roles and responsibilities.

It is expected that EMSA contracted oil recovery vessels meet the highest standards regarding the performance of the vessels and their crews. In particular, achievement of the following aims is essential:

- To provide Member States with appropriate response capacity;
- To incorporate EMSA vessels into existing response systems of Regional Agreements other Agreements and Member States.

These aims can only be reached by EMSA vessels by adequate and effective exercising pollution response activities.

3. Drills and Exercises by the EMSA contracted Vessels

As indicated in the Vessel Availability Contract there is a difference between **drills** and **exercises**.

The purpose of a drill for the contractor is to prove to EMSA his capability to respond effectively to oil spills at sea as requested by the Contract. During a drill the main focus is on the skills to operate the vessel and oil pollution response equipment and the technical condition of the pollution response arrangement.

Exercises at sea have a wider scope than drills. Their purpose, besides testing the vessel's equipment and crew performance in equipment deployment is also to provide the opportunity to test and train pollution response competencies within a regional or an international scope. The main focus being set on co-operation and co-ordination with other vessels, oil pollution response teams, at sea operation command structure, etc. Such exercises are always addressed to enhance and enforce the local or regional at sea oil pollution response system.

3.1 Types of Drills and Exercises

3.1.1 Drills

There are three types of drills:

- a) Acceptance Drill;
- b) Quarterly Drill;
- c) Extended Quarterly Drill.

3.1.1.1 Acceptance Drills

The Acceptance Drill is one of the final events of the Preparatory Phase of the contract.

The purpose of this 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 to prepare the vessel for the tasks under the contract. The Acceptance Drill is accompanied by the assessment of the vessel, oil pollution response equipment and the relevant certificates.

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.

3.1.1.2 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 present the fulfilment of these obligations, the contractor is obliged to carry out drills, on a quarterly basis. The drills are assessed by EMSA observers. The satisfactory performance of the drill is a condition for the payment of the availability fee by the Agency.

3.1.1.3 Extended Quarterly Oil Pollution Response Drill

In accordance with article III.2.2.3 of the Vessel Availability Contract, the Contractor is requested to perform an extended drill once per year over a period of minimum 2 days. During an extended drill, in addition to the performance of the practical deployment of the equipment, the Contractor will provide a theoretical training for all crew members involved in the pollution response activities.

The main scope of the theoretical training is to improve the preparedness of the crew for oil pollution response operations. This training is an independent activity that might be conducted either the day before or the day after the practical deployment of the equipment is performed. The theoretical training may consist of 1-day seminar delivered by the Oil Spill Coordinator with the assistance of EMSA observer attending the drill. Should the Contractor deem more appropriate to foresee a different duration, this proposal should be agreed with EMSA.

The Contractor will set the Agenda for the extended drill in coordination with EMSA. With regard to the theoretical training, the programme of the IMO Model Training Courses (OPRC level 1 and 2) could be taken as reference by the Contractor while drafting up the Agenda. Although the content of the Agenda may vary subject to the priorities that might be identified for a specific Contractor, the following main issues are recommended to be included in the programme:

1. Operational procedures: Review of both roles and responsibilities of the crew members with reference to the Shipboard Operational Procedures.
2. Equipment issues/troubleshooting: Revision of the equipment shortcomings experienced during previous drill, and ways to overcome equipment technical failures.
3. Safety aspects/considerations during oil recovery operations.

4. EMSA oil pollution response mandate: Description of the service provided by the EMSA Network of Stand-by Oil Spill Response Vessels along the European coastline.
5. Oil recovery operations: Review of the Contractor's mobilisation plan. Coordination with other response units in order to envisage the integration of the vessel in a multinational response fleet under the command of a Member State.

The theoretical training offers a ground for discussion about practical issues that might have been identified over the quarterly drills. EMSA observer will assess the performance of the theoretical training. The outcomes of this assessment will be then considered for follow-up actions.

The Contractor is also requested to include the results of the theoretical training in the drill report and to give qualitative observations in order to contribute to the improvement of future extended drills.

3.1.2 Exercises

As regards the different types of pollution response exercises performed by EMSA contracted vessels, and as it will be further developed, they are the following:

1. Notification Exercise
2. Operational Exercise ("Delta" Exercise)
 - a) Vessel Mobilisation Exercise;
 - b) Oil Pollution Equipment Mobilisation Exercise;
 - c) International Exercise;
 - d) EMSA Exercise.

3.1.2.1 Notification Exercise

The aim of the notification exercise is to verify the performance of the agreed emergency and notification procedure and lines of communication for reporting, requesting and providing assistance. The oil pollution response equipment and the Vessel are not used during such an exercise. Participating parties to such exercises usually are: EMSA, EMSA's contractor, Emergency Response Coordination Centre (ERCC DG ECHO) and a Member State requesting assistance.

3.1.2.2 Operational Exercise

a) Vessel Mobilisation Exercise

The purpose of this exercise is to test the contractor's ability to mobilise the vessel within the time frame set in the Contract. This exercise involves the vessel and the equipment.

b) Equipment Mobilisation Exercise

The purpose of these exercises is to test the contractor's contingency arrangements. This type of exercise involves the equipment only. The vessel is not involved.

c) International

The purpose of this type of exercise is to test and to practice international co-operation during at sea pollution response action. The exercise involves individual or multiple EMSA contracted vessels, their equipment and other vessels and equipment of the Member States participating in the exercise. Two types of this exercise can be distinguished:

- Fully Equipped Vessel Exercise: Fully equipped EMSA contracted vessel participates in the exercise

- Equipment Exercise: The EMSA contractor provides only the equipment for the exercise not involving the vessel.

d) EMSA Exercise

The purpose is the same as the international exercise. The only difference is that the role of the hosting country is played (with all the consequences) by EMSA.

4. Drill performance

Whilst drills and exercises provide a valuable opportunity for crews to practice their oil spill response skills and techniques, they should not be regarded as the primary occasion for obtaining and improving those competencies.

Experience has repeatedly shown that unless crew members train and practice in anticipation of drills, exercises, and indeed live operations, they invariably deliver below-par performances.

It is the responsibility of the contractor to provide trained and competent crews.

4.1 Drill performance

The Acceptance Drill will take place after the Completion Report is received by EMSA. The inspection of the vessel will be made at the same time. The Master, Response Co-ordinator and Crew will participate in this event. EMSA may send an inspection team who will observe the drill. During the inspection and the drill the whole pollution response system of the vessel will be tested to determine if the contractor achieved, during the Preparatory Phase of the Contract, suitable and sufficient response capabilities according to the requirements of the Contract.

The purpose of the Quarterly Drills is for the contractor to demonstrate their sustained capabilities to provide the contracted services.

The Master, Response Co-ordinator and Crew will participate in this event. EMSA may send an observer to verify performance.

Quarterly Drills, normally performed 4 times per year (quarterly), are the qualifying condition for the payment of the Vessel Availability Fee. Payment of each fee instalment is triggered only if each drill is assessed positively by the Agency. Therefore, it is paramount that drills are successful.

It should be stressed that the Acceptance Drill and Quarterly Drills must not be the only occasion when the vessel crew trains on the operation of the equipment. The crew's skills in operating the pollution response equipment and the readiness of the equipment itself should be attained in advance of, and not during, the drill.

It is recommended that equipment Standard Operating Procedures (SOPs) are developed and that these are applied when designing training plans.

Such SOPs should describe in detail all of the activities and tasks for each particular crew member related to the deployment, operation, recovery, and trouble-shooting of the vessels pollution response systems. Utilisation of these procedures will also allow the crew to familiarise themselves with the tasks involved in the equipment operation theoretically, without actually deploying the equipment.

It is essential that all equipment is checked and proved to be fully operational before the drill. Recent experience has shown that omitting to check the equipment before the drill was often the reason that the drill was not performed successfully due to a failure of the elements of the equipment.

Quarterly Drills are often arranged by the contractors in conjunction with the Exercises.

It must be stressed that EMSA may accept this practice only if the Quarterly Drill precede the Exercise.

If the Contractor fails to perform according to the standards set-out in these Guidelines, EMSA will request a repetition of the drill. The financial consequences are indicated in the vessel availability contract.

4.2 Drill Scenario Overview

Details of the drill scenario should be prepared and submitted to EMSA by the contractor at least 10 days before the drill is commenced. EMSA may modify the drill scenario proposed by the contractor and request the performance of specific elements of the pollution response operation. Such requests will be based on the evaluation of the previous drills.

The proposed scenarios should take into consideration the level of the crew skills, experience and previous performance. The scenarios should not be repetitive or too simple and easy to execute. Simple scenarios are more appropriate for the vessels beginning their service within the EMSA Network rather than for experienced vessels, as they not always cover the entire aspects of the response system.

Drill scenarios should be structured in a way that they could evolve in complexity. They should focus on weak elements previously identified or elements not previously exercised e.g. discharge of recovered oil, manoeuvring with the boom deployed, slick detection system operating etc. The established routines such as the deployment of the sweeping arms do not have to be performed during each drill if adequate skills were previously demonstrated.

The following elements can be included in a drill:

- Notification;
- Mobilisation / Loading and fitting the equipment;
- Briefing;
- Deployment of equipment. If required, the contractor should arrange an appropriate second vessel with adequate power for boom towing in U or J configuration;
- Achievement of values for equipment performance parameters (must be in agreement with the standards set in these Guidelines);
- Termination of response, cleaning, maintenance and re-stowing of equipment. Post-incident de-briefing and reporting.

Sufficient time must be planned for and allowed to enable a full demonstration of all elements of the operation during all drills. In relation to the theoretical training requirements set in the tender specification it would be beneficial to combine drills (practical training) with a theoretical training (IMO courses). In a case of such an "extended drill" at least two days should be spent for its execution.

4.3 Execution of the Elements of the Drill

4.3.1 Notification

As an initial step of the drill, EMSA may notify the contractor that there is a pollution incident requiring the vessel to respond.

The contractor should proceed according to the internal emergency notification procedure submitted to EMSA as part of the Operations Manual in the Completion Report.

Although drills are pre-planned and the element of surprise is missing, the notification part should be exercised anyway to develop familiarity with the requirements for completing, signing, and transmitting the relevant contractual documents. The Notification part of the drill will be considered as completed when EMSA receives an Incident Response Contract form duly signed by the EMSA contractor and the Member State requesting assistance. IRC should be signed by the contractor and sent to MS within the time shorter than 2 hours from the notification by EMSA.

4.3.2 Mobilisation

Once the vessel has been notified it is recalled to its Port of origin. It is acceptable, for drill purposes, if ship is already in port before notification.

Two sets of oil pollution response equipment – the primary set (sweeping arms) and the secondary set (skimmer and boom) will be transported from the depot, loaded and installed on board the ship (if not already permanently installed on-board). This should be done after notification as part of the normal mobilisation procedure. Pre-positioning of the equipment in anticipation of the notification is not acceptable.

After loading the equipment, the ship then sails to the drill site.

The time for the vessel mobilisation must be within the mobilisation time frame specified in the Contract.

4.3.3 At-Sea Deployment of the Containment, Recovery Equipment and dispersant spray system.

Deployment of any sets of oil response equipment will be observed and assessed. This will include:

- Sweeping arms, one either side of the vessel;
- Boom and skimmer;
- Weir boom;
- Deployment of both dispersant spray booms and utilisation of both rows of nozzles will be observed and assessed.

At sea deployment of the equipment must be conducted according to performance standards specified in Annex 1 to these Guidelines.

The contractor should arrange a suitable support vessel (tender boat, tug boat or other) to assist deployment and towing of boom in U or J configuration and/or, where applicable, deployment of weir boom, if they are envisaged as part of the exercise scenario. Note that in principle both types of configuration will be deployed over the course of different drills. Poor boom towing skills have been problematic in the past, so the contractor should use vessels and crews that have developed a good familiarity during previous training events.

Operation and performance testing of the boom should be conducted in normal working conditions. Effective communications, coordination, and control between the contracted vessel and the support vessel(s).

4.3.4 Termination of the drill

The drill is considered to be completed after successful fulfilment of the drill scenario including debriefing and equipment demobilisation (cleaning and storage). Debriefing should be conducted by Response Co-ordinator.

4.4 Drill Evaluation

In general, EMSA will evaluate:

- The crew's skill and efficiency in loading, installing, deploying, recovering, and troubleshooting the equipment as defined in the contract;
- Performance of the contractors response Co-ordinator;
- Safety of the equipment deployment and operation;
- Compatibility of equipment (connectors, hoses etc.);
- Working parameters of the Oil Pollution Response equipment.

For the drill evaluation EMSA will apply standards specified in these Guidelines. The standards have been set based on the requirements of the Contract, Tender's technical specifications, equipment performance parameters presented in the equipment operational manuals provided by the manufacturers and practical experience gathered during drills and exercises conducted in the past.

Functioning of the laboratory and the slick detection equipment will be assessed using the calibration tests specified in the manufacturers' equipment operational manuals. Equipment assessment includes:

- Oil slick detection system;
- Interface detection system (storage tank oil water separation system);
- Gas detector;
- Flash point tester;
- Portable cleaning system;
- Sampling mini-lab.

More specific technical elements will be assessed for the different types of equipment.

For the evaluation EMSA observers will use the Drill / Exercise Evaluation Method described in Annex 1.

4.4.1 Drill Evaluation Criteria

Elements which can be assessed and criteria applied include, but are not limited to:

General

- Vessel maximum speed 12-15 knots;
- Vessel minimum speed 1-2 knots;
- Storage capacity as defined in the Contract;
- Heating capacity as defined in the Tender Technical Specification;
- Hydraulic systems operational and functioning correctly;
- Cranes operational and able to be remotely controlled from control desk;
- Oil slick detection system operational;
- Emergency stops in all equipment functional.

Sweeping Arms System

- Sweeping arms system deployed and hoisted into position remotely from control desk. Timing standards for deployment for different types of sweeping arms are specified in Annex 1;
- Sweeping arms system deployed at towing angle of approximately 60° with vessel speed of 1.5 – 3 knots;
- Sweeping Arm Skimmer pumping capacity;
- Sweeping arms system recovery. Timing standards for recovery of both sweeping arms for different types of sweeping arms are specified in Annex 1;
- Change of oil recovery cassette modules.

Booms and Skimmer System

- Boom deployment operation. Timing standards for deployment of different types of booms are specified in Annex 1;
- Boom recovery. Boom recovery timing standards for different types of booms are specified in Annex 1;

- Skimmer deployment and skimmer operation. Timing standards for the skimmer deployment are specified in Annex 1;
- Skimmer pumping capacity;
- Skimmer recovery. Timing standards for the skimmer recovery are specified in Annex 1.

Weir Boom

- Boom deployment operation. Timing standards for deployment as specified in Annex 1;
- Boom recovery operation. Timing standards for recovery as specified in Annex 1;
- The balance of the boom, the weir and the discharge pumps performance.

Dispersant spray system/Dispersant container

- Dispersant support booms mounted safely within the forecastle;
- Dispersant support booms deployed and nozzle manifold positioned at three to four meters above the sea surface. Timing standards for the deployment are specified in Annex 1;
- System test;
- Regulation of the dispersant dosage rate remotely from control desk and by varying the vessel's speed in combination with one or both of the nozzles types;
- Dispersant container safely fitted on deck, functioning and correctly connected.

Storage Tank Filling / Discharge Pump system

- Tanks filled via common collecting system from different recovery devices;
- Discharge pumping capacity based on emptying all storage tanks filled with water according to the bid presented by the contractor.

The vessel's crew skills

- Crew Members operating equipment should be familiar with the equipment, skilled in the equipment deployment, complying with safety rules, understanding emergency procedures;
- On the bridge response co-ordinator's performance. Adequate control and co-ordination of the pollution response action;
- Slick detection system operated by the trained and skilled operator (preferably by the response co-ordinator);
- Crew members dedicated to operate cranes and davits with adequate skills;
- Laboratory equipment operated by trained and skilled personnel;
- Communication (on the bridge, on the deck and with other vessels) loud and clear.

Response Termination

- Equipment cleaning;
- Storage;
- Maintenance etc.

Debriefing

- Summary of the drill;
- Conclusions;
- Necessary improvements.

4.5 Drill Report

A report submitted by the contractor describing the successful performance of the quarterly drill is a condition for invoicing and payment of the quarterly availability fee.

The report should contain:

- Description of the drill scenario;
- Main tasks and goals of the drill;
- Timetable of the performance of the particular elements of the drill;
- Information on the place of the drill, weather conditions and participating units;
- List of personnel participating in the drill with description of the function and tasks of each person involved as well as Pollution Response Course (IMO level1 or 2) certificates possessed by this personnel and their records of participation in previous drills;
- Drill evaluation including Conclusions (assessment of the vessel, crew and equipment performance based on the criteria described in these guidelines);
- Description of any follow up action.

The report should be submitted within 30 days following the drill. The drill report template is included in Annex 3.

5. Exercises Performance

The types of exercises requested to be performed by the EMSA vessels should be normally specified in the Vessel Availability Contracts. However, in the earlier Contracts from 2005, 2006 and 2007 the particular types of exercises were not defined, but the broad definition of the pollution response exercises required by those Contracts allows EMSA for the reason of clarification to introduce the specific types of exercises described below.

5.1 Notification Exercises

EMSA may request the contractor to perform these exercises up to four times per year. The number of exercises per year will depend on the results of the previous Notification Exercises carried out by the Contractor – poor performance will demand more frequent practice.

Cost of notification exercises is born by the contractor.

Notification exercises will normally be launched without any prior warning.

At EMSA's request, each contractor will perform notification exercises in order to prove that the Emergency procedures are properly implemented. In particular, the Alert, Mobilisation and Administrative procedures will be tested. These exercises may take place in isolation or may form part of other types of exercises arranged by EMSA or a Member State. In such a case the contractor will co-operate with the participating parties and will apply the relevant procedures (e.g. signing of the Incident Response Contract). EMSA may send an observer to this type of exercise.

A Notification Exercise will normally include the following steps:

- 1) EMSA receiving from the Monitoring and Information Centre (MIC) (or other source) information about a fictitious pollution incident in European Waters.

- 2) EMSA sending to the contractor the Pollution Information Report requesting information on the availability of the contracted vessel.
- 3) The contractor sending to EMSA requested information.
- 4) EMSA receiving from the MIC request for assistance to the affected Member State.
- 5) EMSA sending the Pollution Response Notice to the contractor together with the Incident Response Contract Template requesting mobilisation of the vessel and signing the IRC with the Member state requesting assistance.
- 6) The contractor sending the filled in and signed IRC to the Member State requesting assistance.
- 7) The exercise is completed when the MS signs the Contract and a copy is received by EMSA.

All correspondence either by fax or e-mail is to be marked with the words EXERCISE, EXERCISE, EXERCISE.

A Notification Exercise can be also conducted without including actions identified in points 1), 2) and 3).

Examples of the documents exchanged during Notification Exercises are attached as Annex 2.

5.2 Operational Exercises

Operational exercises involving actual mobilisation of the vessel and/or the equipment.

EMSA may request the contractor to participate in an operational exercise at sea.

The relevant costs of all operational exercises are borne by EMSA according to the rules set in the Contract. According to the Contract, the contractor is obliged to participate in operational exercises at sea upon EMSA's request for up to 10 days per year.

Operational exercises may take different forms depending on the objectives defined by EMSA or the exercise organiser. In each case, EMSA will provide the contractor with a detailed scenario.

The five types of the operational exercises can be distinguished:

- 1) Vessel Mobilisation Exercise
- 2) Equipment Mobilisation Exercise
- 3) International Exercise
 - a) Fully Equipped Vessel Exercise
 - b) Equipment Exercise
- 4) EMSA Exercise

Vessel mobilisation exercises and equipment mobilisation exercises are likely to be launched without any prior warning.

The contractor will be notified at least 30 days in advance of Vessel International and EMSA exercises.

The Master, Response Co-ordinator and Crew will participate in all Operational Exercises. EMSA may send an observer.

5.2.1 Vessel Mobilisation Exercise

This exercise involves the vessel and the equipment.

The purpose of this exercise is to test the contractor's ability to mobilise the vessel within the time frame 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 will be 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.

Without any prior warning the signal for the vessel's mobilisation will be initiated by EMSA as it would do during a real spill situation.

The exercise would normally include the following steps:

- 1) Notification procedure (the Notification Exercise);
- 2) The vessel mobilisation (sailing to the port, discharging cargo, loading equipment).

The exercise ends when the vessel is ready to sail to the response site with the equipment on board and cargo tanks empty.

The relevant costs of Vessel Mobilisation exercises are born by EMSA in accordance with the Contracts.

5.2.2 Equipment Mobilisation Exercises

This type of exercise involves the equipment only. The vessel is not involved.

The purpose of these exercises is to test the contractor's contingency arrangements.

EMSA may launch this type of exercise twice during the contractual period. Under normal circumstances, equipment mobilisation 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.

Without any prior warning EMSA may request equipment mobilisation.

The exercise ends when the equipment and the infrastructure for its loading and installation are ready on the pier of the vessel's departure.

5.2.3 International Exercises

This type of exercise involves individual or multiple EMSA contracted vessels and/or their equipment and other vessels and equipment of the Member States participating in the exercise. These exercises are organised by a Member State individually or within a framework of the Regional Agreements. By their nature, International Exercises are not organised by EMSA and consequently, EMSA has very little influence over their timing, location, or content.

The main elements to be trained during an International Exercise are typically the following:

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

The Agency will notify the contractor about these Exercises at least 30 days in advance.

EMSA will provide the contractor with the Organiser's contact point details and if necessary will facilitate contacts. However, all organisational arrangements with the exercise organiser are the responsibility of the contractor who is expected to liaise directly.

The usual set of the exercise preparation documentation consists of:

- 1) Invitation to the exercise (addressed by the organiser to EMSA);
- 2) Exercise scenario;
- 3) Description of the command structure;
- 4) List of the participating parties (vessels, observers);
- 5) Description of the exercise area (map);
- 6) Grid for the exercise area;
- 7) Mooring plan;
- 8) Programme for the additional events.

5.2.3.1 Fully Equipped Vessel Exercise

In this case, EMSA requires the contractor to participate in the exercise with the fully equipped vessel. Details regarding the procedures and payments are provided in the Vessel Availability Contract.

5.2.3.2 Equipment Exercise

EMSA may request the contractor to participate in the exercise only with the pollution response equipment (not involving the vessel).

5.2.4 EMSA Exercises

The exercise is arranged and commanded by EMSA. It may involve one or more EMSA contracted vessels, as well as vessels of the invited Member States.

The elements to be exercised are the same as during the international exercise. The only difference is that the EMSA is responsible for the organisation of the whole exercise (including arrangements for the exercise participants, area, scenario, command, briefing and debriefing and finally the exercise evaluation). EMSA will cover the contractor's costs related to the exercise in line with the Vessel Availability Contract.

The Agency will notify the contractor of an EMSA Exercise at least 30 days in advance.

EMSA will provide the contractor with the Exercise Scenario and all related documents.

The contractor will appoint a contact person to co-operate with EMSA on the exercise organisation.

5.3 Exercise Evaluation

All exercises will be evaluated by the Managing Party (EMSA and/or the Member States).

Conclusions of the evaluation will be used as a basis for actions to improve the contractor's/vessel's/equipment/crew's pollution response performances as well as the Agency's role/contribution.

Depending on the outcome of the evaluation, EMSA will influence the programme of the next exercise to focus on the elements of the exercises assessed as weak points.

For the evaluation of the EMSA contracted vessel/s performance during the exercise EMSA observers use the drill performance evaluation criteria and standards.

If EMSA observer is not attending the drill or exercise evaluation should be conducted by the contractor (Response co-ordinator or other person assigned by the contractor) on the basis of these guidelines.

Drill and Exercise Evaluation Method is described in Annex 1.

5.4 EMSA Vessel Network Exercises: Summary Table

| TYPE OF THE EXERCISE | DESCRIPTION | INDICATIVE MAX. NUMBER | COSTS |
|--|--|--|---|
| Notification Exercise | <p>Desk top exercise. Vessel and equipment not mobilised.</p> <p>Exercising EMSA/Member State/ MIC/ Contractor Emergency Procedures</p> <p>Launched without a prior warning.</p> | <p>Up to 4 times per year. The number depending on the results of the previous Notification Exercises carried out by the contractor.</p> | <p>Born by the Contractor</p> |
| Vessel Mobilisation Exercise | <p>Operational exercise. The vessel and equipment mobilised. Equipment not deployed.</p> <p>Exercise to test the contractor's mobilisation capabilities.</p> <p>Launched without a prior warning.</p> | <p>Once during the Contract duration. Launched exceptionally in case the contractor mobilisation capabilities are questioned.</p> | <p>Born by EMSA according to the rules set in the Contract.</p> |
| Equipment Mobilisation Exercise | <p>Operational exercise. Only equipment mobilised. Exercise to test the contractor's emergency logistics.</p> <p>Launched without a prior warning.</p> | <p>Twice during the Contract duration.</p> | <p>Born by EMSA according to the rules set in the Contract.</p> |
| International Exercise <ul style="list-style-type: none"> • Fully Equipped Vessel • Equipment | <p>Operational exercise. The vessel and equipment mobilised. Equipment deployed. Exercise organised and commanded by the Member State or by EMSA. Respectively EMSA vessel acts as an invited party or a host party.</p> | <p>Up to three times per year. Within the framework of the 10 days of exercises required by the Contract.</p> | <p>Born by EMSA according to the rules set in the Contract.</p> |

| | | | |
|-----------------------------|---|--|--|
| <p>EMSA Exercise</p> | <p>Exercise conducted according to the scenario provided by the organiser.</p> <p>Main elements to be trained:</p> <ul style="list-style-type: none"> -Co-operation with other vessels and with the command structure of the Member State requesting assistance -Communication with other vessels, aircraft and land stations. -Vessel and equipment handling during a response operation. | | |
|-----------------------------|---|--|--|

5.5 Exercise Report

A report submitted by the contractor describing the successful performance of the exercise is a condition for invoicing and payment of the contractor's expenses related to the exercise.

The report should be submitted within 30 days following the drill. The exercise report and supporting documents templates are included in Annex 4.

Annex 1: Drill / Exercise Performance Evaluation Method

The performance of particular elements of drills and exercises are evaluated with a 5 grade scale.

The performance components should be justified with notes from 0 (zero) for the lowest level to 4 (four) for the highest level of performance in steps of 1 (one).

| LEVEL of PERFORMANCE | Score |
|--|-------|
| Performance high above required minimum standards (Very good) | 4 |
| Performance above required minimum standards (Good) | 3 |
| Performance achieving required minimum standards (Sufficient) | 2 |
| Performance close to required minimum standards (Insufficient) | 1 |
| Performance far below required minimum standards (Poor) | 0 |

The EMSA observer participating in drill or exercise will assess the whole performance as well as all single parts (components) of the performance. His/her rating shall give a standardised judgement which will enable further assessment and a follow up.

For the drill/exercise performance to achieve a “Pass” the average of all components must equal or exceed 2 and no component may score zero (0).

If the total result (arithmetical average) should be less than 2 and/or one or more components should be rated with 0, the whole drill/exercise must be repeated until a satisfactory performance is achieved.

For the adequate evaluation Drill and Exercise Evaluation Form including **Drill / Exercise Evaluation Chart** should be applied.

Drill performance standards and scoring guidelines are contained in Addendum to Annex 1.

It must be noted that performance standards and scoring guidelines cannot describe all situations and circumstances occurring during a drill or exercise. In consequence they should be treated as indicative information. First of all a common sense and a clear judgement must be used for the drill and exercise assessment. This should especially apply to timings in case of adverse weather/sea conditions.

TECHNICAL REPORT

| | |
|--------------------|--|
| Subject: | |
| Contractor | |
| Vessel | |
| Date | |
| Place | |
| Attached to | |

Contents

- 1. Introduction**
- 2. Drill Performance**
- 3. Drill Evaluation**
- 4. Conclusions / Follow up**

1. Introduction

1.1 Relevant follow-up issues from previous drills

1.2 Focus of this drill

2. Drill performance

2.1 Participants

| | Name | Organisation/Company |
|-----------------------|------|----------------------|
| Vessel | | |
| Support vessel | | |
| Oil Spill Coordinator | | |
| Observer | | |
| Observer | | |

2.2 Location and weather conditions

Location:

- Latitude:
- Longitude:

| Weather conditions | | | | | | |
|--------------------|---------------|------------------|------------------|-----|------------|---------------------|
| Wave height m | Wind knots | Current knots | Temperature [°C] | | Visibility | Time period (LT) |
| | | | Water | Air | | |
| | | | | | | |
| | | | | | | |

3. Drill / Exercise Evaluation Chart

| | | A | | | B |
|------------------|------------------------------------|-----------------------------|--|-----------------|--------------|
| Equipment | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| General | Storage | | Equipment stored according to specs | | |
| | Mobilisation | | Sufficient logistics to deliver equipment to the vessel | | |
| | Equipment loading and installation | | Smooth and timely operation, sufficient skills of the crew | | |

| | | A | | | B |
|--|-----------------------------|-----------------------------|--|-----------------|--------------|
| Equipment | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Sweeping arms -Port Side (PS) -Starboard (Stb) | Deployment | | Timing, efficiency | | |
| | Manoeuvring | | Maintaining speed and course | | |
| | Recovery | | Timing, efficiency | | |
| | Safety | | Safety features in place | | |
| Sweeping arms' skimmer and pumps -Port Side (PS) -Starboard (STb) | Skimmer module exchange | | Timing, efficiency | | |
| | Pumping capacity | | Capacity according to tech. specs | | |
| | Condition of equipment | | Equipment complete and maintained according to specs | | |
| | Readiness for deployment | | Equipment on deck operational and ready for immediate deployment | | |
| Sweeping arms' hydraulic steering gear | Operation ability | | Operational | | |

| | | | | | |
|---|-------------------------------------|--|--|--|--|
| Sweeping arms' power pack -Port Side (PS) -Starboard (Stb) | Condition of equipment | | Equipment complete and maintained according to specs | | |
| | Operational readiness | | Equipment on deck operational and ready for immediate action | | |
| Sweeping arms' oil hoses -Port Side (PS) -Starboard (Stb) | Oil and hydraulic hoses connections | | Correct connections, safe and in order alignment of hoses on the deck. | | |
| | Condition of equipment | | Equipment maintained according to specs | | |
| Sweeping arms' cranes -Port Side (PS) -Starboard (Stb) | Condition of equipment | | Equipment complete and maintained according to specs | | |
| | Operational readiness | | Equipment on deck operational and ready for immediate action | | |
| | Crane operator skills | | Crane operated safely with sufficient skills | | |

| | | A | | | B |
|------------------|------------------------|-----------------------------|--|-----------------|--------------|
| <i>Equipment</i> | <i>Test objective</i> | <i>Included y-1 n-0</i> | <i>Evaluation criteria</i> | <i>Comments</i> | <i>Score</i> |
| Boom set | Deployment | | Timing, efficiency | | |
| | Manoeuvring | | Maintaining speed, course and shape (J or U) | | |
| | Recovery | | Timing, efficiency | | |
| | Safety | | Safety features in place | | |
| | Condition of equipment | | Equipment maintained according to specs | | |
| | Operational readiness | | Equipment on deck operational and ready for immediate deployment | | |

| | | A | | | B |
|------------------------|--------------------------|-----------------------------|--|-----------------|--------------|
| Equipment | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Skimmer set | Deployment | | Timing, efficiency | | |
| | Manoeuvring | | Maintaining speed and course | | |
| | Recovery | | Timing, efficiency | | |
| | Safety | | Safety features in place | | |
| Skimmer modules | Skimmer module exchange | | Timing, efficiency | | |
| | Condition of equipment | | Equipment complete and maintained according to specs | | |
| | Readiness for deployment | | Equipment on deck operational and ready for immediate deployment | | |
| Skimmer pumps | Pumping capacity | | Capacity according to tech. specs | | |
| | Condition of equipment | | Equipment complete and maintained according to specs | | |

| | | | | | |
|--|-------------------------|--|--|--|--|
| Skimmer oil and hydraulic hoses | Oil and hydraulic hoses | | Correct connections, safe and in order alignment of hoses on the reel. | | |
| | Condition of equipment | | Equipment maintained according to specs | | |
| Skimmer power pack | Condition of equipment | | Equipment complete and maintained according to specs | | |
| | Operational readiness | | Equipment on deck operational and ready for immediate action | | |
| Skimmer crane | Condition of equipment | | Equipment complete and maintained according to specs | | |
| | Operational readiness | | Equipment on deck operational and ready for immediate action | | |
| | Crane operator skills | | Crane operated safely with sufficient skills | | |
| Skimmer remote control | Operation ability | | Operational | | |

| | | A | | | B |
|------------------|---------------------------------------|-----------------------------|---|-----------------|--------------|
| Equipment | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Weir Boom | Deployment | | Timing, efficiency | | |
| | Manoeuvring | | Maintaining speed, course and shape (J or U) | | |
| | Recovery | | Timing, efficiency | | |
| | Safety | | Safety features in place | | |
| | Condition of equipment | | Equipment maintained according to specs | | |
| | Operational readiness and performance | | Equipment and ancillaries operational. Boom balance, weir and pump performance | | |

| | | A | | | B |
|---------------------------------------|-------------------------------------|-----------------------------|--|-----------------|--------------|
| Equipment | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Slick detection system | Equipment installation | | Equipment installed properly and operational | | |
| | Crew skills in operating the system | | Knowledge of the system hardware and software. Practical oil detection | | |

| | | A | | | B |
|---|-----------------------------------|-----------------------------|--|-----------------|--------------|
| Equipment | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Dispersant spray booms -Port Side (PS) -Starboard (Stb) | Deployment | | Timing, efficiency | | |
| | Test, utilisation and manoeuvring | | Choice of speed according to the given DOR - Maintaining speed and course | | |
| | Recovery | | Timing, efficiency | | |
| | Health and Safety | | Health and Safety features in place | | |
| Booms, Nozzle, hoses, winches, pump, fixed pipeline, control systems and dispersant containers | Operational readiness | | Equipment complete, correct connections, installed properly, operational and ready for immediate operation | | |

| | | A | | | B |
|---------------------------------|-------------------------|-----------------------------|--|-----------------|--------------|
| Equipment | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Laboratory equipment | Gas detecting | | Detecting skills of the crew member proved | | |
| | Flash point measurement | | Measuring skills of the crew member proved | | |
| | Other | | Skills of the crew member proved | | |
| Discharging system | Discharging pumps | | Pumping capacity according to specs | | |
| | Decanting | | Decanting abilities | | |
| | Heating | | Heating parameters according to specs | | |
| | Oil water separation | | Oil water separator operational, parameters according to specs | | |

| | | A | | | B |
|--|---|-----------------------------|--|-----------------|--------------|
| Vessel Crew | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Deck crew | General safety of the equipment operations | | PPE used, safe manning of the equipment | | |
| | Theoretical training | | Certificates proving required level of training | | |
| | Experience of the crew | | Number of crew members with experience from participation in previous drills | | |
| | On deck co-ordination | | Personnel deploying the equipment co-ordinated and guided sufficiently | | |
| Spill response co-ordinator | Spill response co-ordination | | Adequate and skilful co-ordination | | |
| | Communication | | Adequate skills and technical means for communication with the deck crew and other vessels | | |
| Captain | Co-operation with the spill response co-ordinator | | Effective co-operation | | |
| | Co-operation with the skipper of the boom towing boat | | Effective co-operation | | |
| Skipper of the boom towing boat | Boom towing | | Adequate skills to maintain the required boom shape | | |

| | | A | | | B |
|-------------------|-------------------------------------|-------------------------|---|-----------------|--------------|
| Management | Test objective | Included y-1 n-0 | Evaluation criteria | Comments | Score |
| Contractor | Planning | | Drill date planned | | |
| | Notification procedure | | Time needed for the IRC signing according to standards | | |
| | Timing | | Drill elements in agreement with the drill scenario timing | | |
| | Accommodation for the EMSA observer | | Satisfactory accommodation | | |
| | Communication | | EMSA notified in advance about all organisational issues related to the drill | | |
| | Drill scenario | | Agreed with EMSA | | |
| | Briefing | | Content quality | | |
| | Debriefing | | Content quality | | |
| Sum A | | | Sum B | | |

Final score = B/A

Final score:

4. Conclusions / Follow up

Addendum to Annex 1: Drill and Exercise Performance Standards and Scoring Guidelines

Table 1 Equipment storage and mobilisation performance scoring

| <i>Equipment</i> | <i>Subject</i> | <i>Test Results</i> | <i>Score</i> |
|------------------|-------------------------------|--|--------------|
| General | Equipment Storage | Equipment stored according to tender specification. Place secured, under the roof, water and electricity supplied, order in warehouse, place clean and well organised, equipment inventory available. | 4 |
| | | Equipment stored according to tender specs. and good standards, however, a need for significant improvements can be pointed out e.g. order in warehouse, warehouse organisation etc. | 3 |
| | | Basic requirements of the tender specs fulfilled. Place under the roof, water and electricity supplied. | 2 |
| | | Some of the basic requirements of the tender specs. not fulfilled. e.g. lack of water or electricity. Place not secured etc. | 1 |
| | | Requirements of the tender specification not fulfilled in general. | 0 |
| | Equipment Mobilisation | Adequate transportation and cranes in place timely arranged. An adequate number of the skilful personnel available. Proper adjustment to the existing conditions (weather, distance) effective problem solving. Optimal equipment mobilisation timing in difficult conditions. | 4 |
| | | Logistic arrangements ensuring effective mobilisation of equipment in normal conditions, ensuring the equipment mobilisation timing at least 2 hours shorter than the one defined in the Operational Manual. | 3 |
| | | Logistic arrangements sufficient for the effective equipment mobilisation in time defined in the Operational Manual. | 2 |
| | | Logistic arrangements in place, however not sufficient for the efficient equipment mobilisation e.g. lack of skills or appropriate number of operators, Not adequate crane (too short of not enough lifting capacity). Not adequate transportation. | 1 |
| | | Failure of the logistics arrangements causing the breach of the contractual mobilisation time. | 0 |

Table 2 Sweeping Arms – Performance scoring

| Equipment | Subject | Results | Score |
|--|--------------------------------|---|--------------|
| Sweeping arms -Port Side (PS) -Starboard (Stb) | Deployment | Timing – see table 4a. | 4 |
| | | Timing – see table 4a. | 3 |
| | | Timing – see table 4a. | 2 |
| | | Timing – see table 4a. Sweeping arm deployed within the time exceeding standard. | 1 |
| | | Sweeping arm not deployed due to a technical failure. | 0 |
| | Manoeuvring | Speed 1- 1.5 knots maintained for a period over 1 hour. Demonstration of ability to change and maintain the assigned courses. | 4 |
| | | Speed 1- 1.5 knots maintained for a period over 0.5 hour. Demonstration of ability to change and maintain the assigned courses. | 3 |
| | | Speed 1- 1.5 knots and assigned course maintained for a period over 0.5 hour. | 2 |
| | | Speed 1- 1.5 knots and assigned course maintained for a short period (less than 0.5 hour). | 1 |
| | | Speed 1- 1.5 knots and assigned course not maintained. | 0 |
| | Recovery | Timing – see table 4a. Sweeping arm secured on the stand. | 4 |
| | | Timing – see table 4a. Sweeping arm secured on the stand. | 3 |
| | | Timing – see table 4a. Sweeping arm secured on the stand. | 2 |
| | | Timing – see table 4a. | 1 |
| | | Sweeping arm not recovered due to a technical failure. | 0 |
| | Safety | Maximum possible safety features in place (safe passages, medical, PPE, no risky actions, proven safety training). | 4 |
| | | Additional safety features in place. Minimal risk level. | 3 |
| Minimum safety maintained. Risk level acceptable. | | 2 | |
| Risk of accident due to the lack of safety features or training. | | 1 | |
| Accident caused by the lack of safety features and training. | | 0 | |
| Sweeping arms' skimmer and pumps -Port Side (PS) -Starboard (STb) | Skimmer module exchange | Skimmer module exchange successful. Time below 0.5 hour. | 4 |
| | | Skimmer module exchange successful. Time below 1 hour. | 3 |
| | | Skimmer module exchange successful. Time below 2 hours. | 2 |
| | | Skimmer module exchange successful. Time exceeding 2 hours. | 1 |
| | | Skimmer module exchange not successful. | 0 |
| | Pumping capacity | Pumping capacity above 100% of the name plate capacity. Test arranged efficiently - flow meter available. | 4 |
| | | Pumping capacity above 100% of the name plate capacity. Tank filling and capacity calculations. | 3 |
| | | Pumping capacity between 75% and 100% of the name plate capacity. | 2 |
| | | Pumping capacity below 75% of the name plate capacity. | 1 |
| | | Pumps not operational or test not arranged as required. | 0 |
| | Pumps exchange | Pumps exchange successful. Time below 0.5 hour. | 4 |
| | | Pumps exchange successful. Time below 1 hour. | 3 |
| | | Pumps exchange successful. Time below 2 hours. | 2 |
| | | Pumps exchange successful. Time exceeding 2 hours. | 1 |
| | | Pumps exchange not successful. | 0 |
| | Operational readiness | Equipment on deck, operational and ready for immediate operation. | 4 |
| | | Equipment on deck operational and ready for deployment at the scheduled time. | 3 |
| | | Equipment installed, some adjustments required to achieve readiness. Effective adjustments within 1 hour. | 2 |
| | | Equipment not ready for operation. Effective adjustments, however, delaying deployment for over 1 hour. | 1 |
| | | Equipment not ready for operation. Ineffective adjustments, readiness not achieved. | 0 |

| Equipment | Subject | Results | Score |
|--|--|--|--------------|
| Sweeping arms' power pack -Port Side (PS) -Starboard (Stb) | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state. | 3 |
| | | Equipment operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| | Operational readiness | Equipment on deck, operational and ready for immediate operation. | 4 |
| | | Equipment on deck operational and ready for deployment at the scheduled time. | 3 |
| | | Equipment installed, some adjustments required to achieve readiness. Effective adjustments within 1 hour. | 2 |
| | | Equipment not ready for operation. Effective adjustments, however, delaying deployment for over 1 hour. | 1 |
| | | Equipment not ready for operation. Ineffective adjustments, readiness not achieved. | 0 |
| Sweeping arms' oil and hydraulic hoses -Port Side (PS) -Starboard (Stb) | Oil and hydraulic hoses connections | Hoses connected properly. Appropriate alignment of hoses on the deck. Operation ability presented with max. pumping capacity for over 1 h. | 4 |
| | | Hoses connected properly. Appropriate alignment of hoses on the deck. Operation with max. pumping capacity for >0.5 h. | 3 |
| | | Hoses connected properly. Operation for 15 – 30 minutes. | 2 |
| | | Problems with connections solved within 1 hour. | 1 |
| | | Hoses not connected. | 0 |
| | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state no oil leaks. | 3 |
| | | Equipment operational. Need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| Sweeping arms' cranes -Port Side (PS) -Starboard (Stb) | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state. | 3 |
| | | Equipment operational. Need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| | Operational readiness | Equipment on deck, operational and ready for immediate operation. | 4 |
| | | Equipment on deck operational and ready for deployment at the scheduled time. | 3 |
| | | Equipment installed, some adjustments required. Effective adjustments within 1 hour. | 2 |
| | | Equipment not ready for operation. Effective adjustments, however, delaying deployment for over 1 hour. | 1 |
| | | Equipment not ready for operation. Ineffective adjustments, readiness not achieved. | 0 |
| | Crane operator skills | Safe and efficient equipment lifting in adverse weather conditions. Proof of participation in previous drills. | 4 |
| | | Safe and efficient equipment lifting. Proof of participation in previous drills and/or exercises. | 3 |
| | | Safe and efficient equipment lifting. | 2 |
| | | Poor skills in operating a crane. | 1 |
| | | Inability to operate a crane, unsafe operation. | 0 |

Table 2a Sweeping Arms – Timing standards

| Sweeping arm type | Deployment time* (min) | Recovery time*** (min) | Score (points) |
|-------------------|------------------------|------------------------|----------------|
| Rigid | < 20 | < 20 | 4 |
| | 20 - 40 | 20 - 40 | 3 |
| | 41 - 60 | 41 - 60 | 2 |
| | 60 < | 60 < | 1 |
| | Not deployed** | Not deployed** | 0 |
| Flexible | < 30 | < 30 | 4 |
| | 30 - 50 | 30 - 50 | 3 |
| | 51 - 60 | 51 - 60 | 2 |
| | 60 < | 60 < | 1 |
| | Not deployed** | Not deployed** | 0 |

* time from the co-ordinator's command until both sweeping arms are fully deployed. Weather/sea conditions should be taken into account.

** deployed sweeping arms = both sweeping arms are floating, pumps connected and operating, remote control operational

*** recovered sweeping arms = both sweeping arms on the stand

**** not recovered = sweeping arm or its parts lost during operations

Table 3 Boom set – Performance scoring

| Equipment | Subject | Results | Score |
|---|-------------------------------|--|--------------|
| Boom set | Deployment | Timing- see table 3a. Full length of the boom floating, all sectors in appropriate position, correctly inflated. | 4 |
| | | Timing- see table 3a. Full length of the boom floating, all sectors in appropriate position, correctly inflated. | 3 |
| | | Timing- see table 3a. Full length of the boom floating. Sector position or inflation adjustments necessary. | 2 |
| | | Timing- see table 3a. Deployed with major problems. | 1 |
| | | Not deployed due to a lack of skills or technical failure. | 0 |
| | Manoeuvring | Desired boom shape and performance achieved and maintained for a minimum 1 hour. Vessels changing courses, speed 1- 2 knots. | 4 |
| | | Desired boom shape achieved and performance maintained for a minimum of 0,5 hour, vessels sailing with an established course and speed 1- 2 knots. | 3 |
| | | Desired boom shape and performance achieved. | 2 |
| | | Desired boom shape and performance not achieved. | 1 |
| | | Desired boom shape not achieved, boom tangled with the vessel or equipment. | 0 |
| | Recovery | Timing- see table 3a. | 4 |
| | | Timing- see table 3a. | 3 |
| | | Timing- see table 3a. | 2 |
| | | Timing- see table 3a. | 1 |
| | | Not recovered due to a lack of skills, technical failure or loss of the equipment. | 0 |
| | Safety | Maximum possible safety features in place (safe passages, medical, PPE, secured working area, no risky actions, proven safety training. | 4 |
| | | Additional safety features in place. Minimal risk level. | 3 |
| | | Minimum safety maintained. Risk level acceptable. | 2 |
| | | Risk of accident due to the lack of safety features and training. | 1 |
| | | Accident caused by the lack of safety features and training. | 0 |
| | Condition of equipment | Equipment in an excellent condition. | 4 |
| | | Equipment operational, in a good state. | 3 |
| | | Equipment operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| | Operational readiness | Equipment on deck, operational and ready for immediate deployment. | 4 |
| | | Equipment on deck operational and ready for deployment. | 3 |
| Equipment installed, some adjustments required to achieve readiness. Effective adjustments within 1 hour. | | 2 | |
| Equipment not ready for deployment. Effective adjustments, however, delaying deployment for over 1 hour. | | 1 | |
| Equipment not ready for deployment. Ineffective adjustments, readiness not achieved. | | 0 | |

Table 3a Boom Set – Timing standards

| Boom type | Length (m) | Deployment time* (min) | Recovery time*** (min) | Score (points) |
|---|------------|------------------------|------------------------|----------------|
| Heavy Duty segmented | 250 | < 30 | < 40 | 4 |
| | | 30 - 60 | 40 - 80 | 3 |
| | | 61 - 80 | 81 - 120 | 2 |
| | | 80 < | 120 < | 1 |
| | | Not deployed** | Not recovered**** | 0 |
| Heavy Duty Single Point Inflation | 250 | < 20 | < 60 | 4 |
| | | 20 - 40 | 60 - 100 | 3 |
| | | 41 - 60 | 101 - 120 | 2 |
| | | 60 < | 120 < | 1 |
| | | Not deployed** | Not recovered**** | 0 |
| Single Point Inflation Open bottom (PVC-Poliester) | 250 | < 15 | < 15 | 4 |
| | | 15 - 30 | 15 - 30 | 3 |
| | | 31 - 40 | 31 - 40 | 2 |
| | | 40 < | 40 < | 1 |
| | | Not deployed** | Not recovered**** | 0 |

* Time from the co-ordinator's command until the boom is fully deployed. Weather/sea conditions should be taken into account.

** Full length of the boom must be floating

***Time from the co-ordinator's command until the boom is fully recovered

****Full length of the boom must be secured on the reel

Table 4 Skimmer set – Performance scoring

| Equipment | Subject | Results | Score |
|--|---------------------------------|--|--------------|
| Skimmer set | Deployment | Timing – see table 5a. | 4 |
| | | Timing – see table 5a. | 3 |
| | | Timing – see table 5a. | 2 |
| | | Timing – see table 5a. | 1 |
| | | Timing – see table 5a. | 0 |
| | Recovery | Timing – see table 5a. | 4 |
| | | Timing – see table 5a. | 3 |
| | | Timing – see table 5a. | 2 |
| | | Timing – see table 5a. | 1 |
| | | Timing – see table 5a. | 0 |
| | Safety | Maximum possible safety features in place (safe passages, medical, PPE, no risky actions, proven safety training). | 4 |
| | | Additional safety features in place. Minimal risk level. | 3 |
| | | Minimum safety maintained. Risk level acceptable. | 2 |
| | | Risk of accident due to the lack of safety features and training. | 1 |
| | | Accident caused by the lack of safety features and training. | 0 |
| Skimmer modules | Skimmer module exchange | Skimmer module exchange successful. Time below 0.5 hour. | 4 |
| | | Skimmer module exchange successful. Time below 1 hour. | 3 |
| | | Skimmer module exchange successful. Time below 2 hours. | 2 |
| | | Skimmer module exchange successful. Time exceeding 2 hours. | 1 |
| | | Skimmer module exchange not successful. | 0 |
| | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state. | 3 |
| | | Equipment operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| | Readiness for deployment | Equipment on deck, operational and ready for immediate operation. | 4 |
| | | Equipment on deck operational and ready for operation at the scheduled time. | 3 |
| | | Equipment installed, some adjustments required to achieve readiness. Effective adjustments within 1 hour. | 2 |
| | | Equipment not ready for operation. Effective adjustments, however, delaying deployment for over 1 hour. | 1 |
| | | Equipment not ready for operation. Ineffective adjustments, readiness not achieved. | 0 |
| Skimmer pumps | Pumping capacity | Pumping capacity above 100% of the name plate capacity. Test arranged efficiently - flow meter available. | 4 |
| | | Pumping capacity above 100% of the name plate capacity. Tank filling and capacity calculations. | 3 |
| | | Pumping capacity between 75% and 100% of the name plate capacity. | 2 |
| | | Pumping capacity below 75% of the name plate capacity. | 1 |
| | | Pumps not operational or test not arranged as required. | 0 |
| | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state. | 3 |
| | | Equipment operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| Skimmer oil and hydraulic hoses | Oil and hydraulic hoses | Hoses connected properly. Appropriate alignment of hoses on the reel and in water, buoys attached. Full length deployed. Operation ability presented with max. pumping capacity for over 1 h – no leaks. | 4 |
| | | Hoses connected properly. Appropriate alignment of hoses on the reel and in water, buoys attached. Full length deployed. Operation ability presented with max. pumping capacity for over 0.5 h - no leaks. | 3 |
| | | Hoses connected properly. Operation ability presented for 15 – 30 minutes. | 2 |
| | | Problems with connections solved in time not exceeding 1 hour. | 1 |
| | | Hoses not connected. | 0 |

| Equipment | Subject | Results | Score |
|---|-------------------------------|--|--------------|
| | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state no oil leaks. | 3 |
| | | Equipment operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| Skimmer power pack | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state. | 3 |
| | | Equipment operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| | Operational readiness | Equipment on deck, operational and ready for immediate operation. | 4 |
| | | Equipment on deck operational and ready for operation at the scheduled time. | 3 |
| | | Equipment installed, some adjustments required to achieve readiness. Effective adjustments within 1 hour. | 2 |
| | | Equipment not ready for operation. Effective adjustments, however, delaying deployment for over 1 hour. | 1 |
| | | Equipment not ready for operation. Ineffective adjustments, readiness not achieved. | 0 |
| Skimmer crane | Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 |
| | | Equipment operational, in a good state no oil leaks. | 3 |
| | | Equipment operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 |
| | Operational readiness | Equipment on deck, operational and ready for immediate operation. | 4 |
| | | Equipment on deck operational and ready for operation at the scheduled time. | 3 |
| | | Equipment installed, some adjustments required to achieve readiness. Effective adjustments within 1 hour. | 2 |
| | | Equipment not ready for operation. Effective adjustments, however, delaying deployment for over 1 hour. | 1 |
| | | Equipment not ready for operation. Ineffective adjustments, readiness not achieved. | 0 |
| | Crane operator skills | Safe and efficient equipment lifting in adverse weather conditions. Proof of participation in previous drills and/or exercises. | 4 |
| | | Safe and efficient equipment lifting. Proof of participation in previous drills and/or exercises. | 3 |
| | | Safe and efficient equipment lifting. | 2 |
| | | Poor skills in operating a crane. | 1 |
| Inability to operate a crane, unsafe operation. | | 0 | |
| Skimmer remote control | Operation ability | Remote control fully operational prepared for long term action spare batteries and parts available and prepared for immediate use. Manoeuvring the skimmer for 1 hour. | 4 |
| | | Remote control fully operational Manoeuvring the skimmer for 0.5 hour. | 3 |
| | | Remote control operational. | 2 |
| | | Remote control not operational, effective repair within 1 hour. | 1 |
| | | Remote control not operational. | 0 |

Table 4a Skimmer Set – Timing standards

| Skimmer type | Deployment time* (min) | Recovery time*** (min) | Score (points) |
|------------------------------|------------------------|------------------------|----------------|
| General | < 15 | < 20 | 4 |
| | 15 - 30 | 20 - 40 | 3 |
| | 31 - 50 | 41 - 60 | 2 |
| | 50 < | 60 < | 1 |
| | Not deployed** | Not recovered**** | 0 |
| High-capacity skimmer | < 15 | < 20 | 4 |
| | 15 - 30 | 20 - 40 | 3 |
| | 31 - 50 | 41 - 60 | 2 |
| | 50 < | 60 < | 1 |
| | Not deployed** | Not recovered**** | 0 |

* time from the co-ordinator's command until the skimmer is fully deployed. Weather/sea conditions should be taken into account.

** deployed skimmer = skimmer floating, full length of the umbilical cord deployed, propulsion and remote control operational

*** recovered skimmer = skimmer on the stand, full length of the umbilical cord secured on the reel

**** not recovered = skimmer or its parts lost during operations

Table 5 Weir Boom

| <i>Equipment</i> | <i>Subject</i> | <i>Results</i> | <i>Score</i> |
|------------------|--|--|--------------|
| Weir boom | Deployment | Timing- see table 5a. Full length of the boom floating, all sectors in appropriate position, perfectly inflated/ballasted. | 4 |
| | | Timing- see table 5a. Full length of the boom floating, all sectors in appropriate position, correctly inflated/ballasted. | 3 |
| | | Timing- see table 5a. Full length of the boom floating. Sector position, ballast, inflation or water pumping adjustments necessary. | 2 |
| | | Timing- see table 5a. Deployed with major problems. | 1 |
| | | Not deployed due to a lack of skills or technical failure. | 0 |
| | Manoeuvring | Desired boom shape and performance achieved and maintained for a minimum 1 hour. Vessels changing courses, speed 0,5- 2 knots. | 4 |
| | | Desired boom shape achieved and performance maintained for a minimum of 0,5 hour, vessels sailing with an established course and speed 0,5- 2 knots. | 3 |
| | | Desired boom shape and performance achieved. | 2 |
| | | Desired boom shape and performance not achieved. | 1 |
| | | Desired boom shape not achieved, boom tangled with the vessel or equipment. | 0 |
| | Recovery | Timing- see table 5a. | 4 |
| | | Timing- see table 5a. | 3 |
| | | Timing- see table 5a. | 2 |
| | | Timing- see table 5a. | 1 |
| | | Not recovered due to a lack of skills, technical failure or loss of the equipment. | 0 |
| | Safety | Maximum possible safety features in place (safe passages, medical, PPE, secured working area, no risky actions, proven safety training). | 4 |
| | | Additional safety features in place. Minimal risk level. | 3 |
| | | Minimum safety maintained. Risk level acceptable. | 2 |
| | | Risk of accident due to the lack of safety features and training. | 1 |
| | | Accident caused by the lack of safety features and training. | 0 |
| | Condition of equipment | Boom sections, hydraulic power packs, control console, recovered oil discharge pump, air fan, water pump, weir pumps, in an excellent condition. | 4 |
| | | Equipment and ancillaries operational, in a good state. | 3 |
| | | Equipment and ancillaries operational. Visible need for maintenance improvement. | 2 |
| | | Technical failure of the equipment and or ancillaries caused by the lack of maintenance. Effective repair effort. | 1 |
| | | Technical failure of the equipment and or ancillaries caused by the lack of maintenance. Non effective repair effort. | 0 |
| | Operational readiness and performance | Equipment and ancillaries on deck, operational, ready for immediate deployment. Once deployed the boom is perfectly balanced, the weir and the discharge pumps working ideally. | 4 |
| | | Equipment and ancillaries on deck operational and ready for deployment. . Once deployed the boom is good balanced, the weir and the discharge pumps working well. | 3 |
| | | Equipment and ancillaries installed, some adjustments required to achieve readiness. Once deployed the boom balancing or pumping issues not affecting the system efficiency. Effective adjustments within 1 hour. | 2 |
| | | Equipment and or ancillaries not ready for deployment. Once deployed balancing or pumping issues affecting the system efficiency. Effective adjustments, however, delaying deployment or boom performance for over 1 hour. | 1 |
| | | Equipment and or ancillaries not ready for deployment. Ineffective adjustments, readiness not achieved or once deployed the system is not working | 0 |

Tab. 5a Weir Boom – Timing standards

| Boom type | Length (m) | Deployment time* (min) | Recovery time*** (min) | Score (points) |
|-----------|------------|------------------------|------------------------|----------------|
| Weir Boom | 300 | < 70 | < 60 | 4 |
| | | 70 - 850 | 60 – 75 | 3 |
| | | 85 – 100 | 75 - 90 | 2 |
| | | 100 < | 90 < | 1 |
| | | Not deployed** | Not recovered**** | 0 |

Table 6. Dispersant spray system – Performance scoring

| <i>Equipment</i> | <i>Subject</i> | <i>Results</i> | <i>Score</i> |
|---|---|---|--------------|
| Dispersant spray booms -Port Side (PS) -Starboard (Stb) Dispersant container on deck | Deployment | Timing see table 6b | 4 |
| | | Timing see table 6b | 3 |
| | | Timing see table 6b | 2 |
| | | Timing. Dispersant spray booms deployed within the time exceeding standard. | 1 |
| | | Dispersant spray booms not deployed due to a technical failure. | 0 |
| | Test, utilisation and manoeuvring | Choice of correct speed according to the given DOR – Ability to maintain speed, course and dosage for a period over 0.5 hour. | 4 |
| | | Choice of correct speed according to the given DOR – Good capacity to maintain speed, course and dosage for a period over 0.5 hour. | 3 |
| | | Choice of correct speed according to the given DOR – sufficient capacity to maintain speed, course and dosage for a period over 0.5 hour. | 2 |
| | | Choice of incorrect speed according to the given DOR or insufficient capacity to maintain speed, course and dosage for a period over 0.5 hour. | 1 |
| | | Choice of incorrect speed according to the given DOR and insufficient capacity to maintain speed, course and dosage for a period over 0.5 hour. | 0 |
| | Recovery | Timing see table 5b –. Dispersant spray booms secured. | 4 |
| | | Timing see table 5b –. Dispersant spray booms secured | 3 |
| | | Timing see table 5b –. Dispersant spray booms secured. | 2 |
| | | Timing see table 5b – Dispersant spray booms secured. | 1 |
| | | Dispersant spray booms not recovered due to a technical failure. | 0 |
| | Health and Safety | Maximum possible health and safety features in place (safe passages, medical, PPE, no risky actions, proven safety training. | 4 |
| | | Additional health and safety features in place. Minimal risk level. | 3 |
| | | Minimum health and safety maintained. Risk level acceptable. | 2 |
| | | Risk of accident due to the lack of safety features or training. | 1 |
| | | Accident caused by the lack of safety features and training. | 0 |
| | Booms, Nozzle, hoses, winches, pump, fixed pipeline, control systems and dispersant containers | Dispersant system, pump, speed adjustment and pressure reading working perfectly. Equipment and dispersant container on deck very well connected operational and ready for immediate operation. | 4 |
| | | Dispersant system, pump, speed adjustment and pressure reading working efficiently. Equipment and dispersant container on deck well connected operational and ready for rapid operation. | 3 |
| | | Dispersant system, pump, speed adjustment and pressure reading working sufficiently. Equipment and dispersant container on deck connected and operational respecting the minimum requirements. Some small adjustments required to achieve readiness rapidly | 2 |
| | | Dispersant system, pump, speed adjustment and pressure reading not properly working. Equipment and dispersant container on deck not arranged as required and not ready for rapid operation. Effective repair effort within 1 hour | 1 |
| | | Dispersant system, pump, speed adjustment and pressure reading not properly working. Equipment and dispersant container on deck not arranged as required and not ready. Ineffective adjustments, readiness not achieved.. | 0 |
| | | | |
| Operational readiness | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Condition of equipment | Equipment in an excellent condition, visually and operationally. | 4 | |
| | Equipment operational, in a good state. | 3 | |
| | Equipment operational. Visible need for maintenance improvement. | 2 | |
| | Technical failure of the equipment caused by the lack of maintenance. Effective repair effort. | 1 | |
| | Technical failure of the equipment caused by the lack of maintenance. Non effective repair effort. | 0 | |

Table 6a Dispersant spray boom – timing standards

| Skimmer type | Deployment time* (min) | Recovery time*** (min) | Score (points) |
|----------------|------------------------|------------------------|----------------|
| General | < 15 | < 20 | 4 |
| | 15 - 30 | 20 - 40 | 3 |
| | 31 - 50 | 41 - 60 | 2 |
| | 50 < | 60 < | 1 |
| | Not deployed** | Not recovered**** | 0 |

Table 7 Slick detection system – Performance scoring

| Equipment | Subject | Test Results | Score |
|-------------------------------|---|---|-------|
| Slick detection system | Equipment condition | Equipment operational with updated software, maintenance record and in excellent operational and visual condition (all parts including radar, monitors and computer). | 4 |
| | | Equipment operational with updated software and maintenance record. | 3 |
| | | Equipment operational. | 2 |
| | | Equipment not operational, repaired within 1 hour. | 1 |
| | | Equipment not operational. | 0 |
| | Crew (responsible person) skills in operating the system | Oil detection skills presented with real oil on the surface. Effective detection and recording. Proof of training by the system manufacturer. | 4 |
| | | Oil detection skills presented without real oil on the surface. Effective detection and recording. Proof of training by the system manufacturer. | 3 |
| | | General knowledge on the system operating presented. | 2 |
| | | Skills in equipment operating not sufficient to ensure the slick detection. | 1 |
| | | Inability to operate the system, lack of responsible personnel. | 0 |

Table 8 Other equipment – Performance scoring

| <i>Equipment</i> | <i>Subject</i> | <i>Results</i> | <i>Score</i> |
|-------------------------|--------------------------------|--|--------------|
| Lab. equipment | Gas detecting | Excellent skills in equipment operation proved. Formal training and experience confirmed. | 4 |
| | | Good skills in equipment operation proved. Formal training confirmed. | 3 |
| | | Basic skills in equipment operation proved. | 2 |
| | | Not adequate skills of the responsible person to conduct measurement and achieve result. | 1 |
| | | Equipment not operational. Lack of the person responsible . | 0 |
| | Flash point measurement | Excellent skills in equipment operation proved. Formal training and experience confirmed. | 4 |
| | | Good skills in equipment operation proved. Formal training confirmed. | 3 |
| | | Basic skills in equipment operation proved. | 2 |
| | | Not adequate skills of the responsible person to conduct measurement and achieve result. | 1 |
| | | Equipment not operational. Lack of the person responsible. | 0 |
| | Other | Excellent skills in equipment operation proved. Formal training and experience confirmed. | 4 |
| | | Good skills in equipment operation proved. Formal training confirmed. | 3 |
| | | Basic skills in equipment operation proved. | 2 |
| | | Not adequate skills of the responsible person to conduct measurement and achieve result. | 1 |
| | | Equipment not operational. Lack of the person responsible. | 0 |
| Discharge System | Discharging pumps | Pumping capacity above 100% of the name plate capacity. Test arranged efficiently - flow meter available. | 4 |
| | | Pumping capacity above 100% of the name plate capacity. Tank filling and capacity calculations. | 3 |
| | | Pumping capacity between 75% and 100% of the name plate capacity. | 2 |
| | | Pumping capacity below 75% of the name plate capacity. | 1 |
| | | Pumps not operational or test not arranged as required. | 0 |
| | Heating | Heating system effectiveness above the nominal capacity. | 4 |
| | | Heating system effectiveness equal to the nominal capacity. | 3 |
| | | Heating system effectiveness above 75 % of the nominal capacity. | 2 |
| | | Heating system effectiveness below 75 % of the nominal capacity. | 1 |
| | | Heating system not operational. | 0 |
| | Oil /water separation | Oil / water separation above the nominal parameters. | 4 |
| | | Oil / water separation effectiveness equal to the nominal parameters. | 3 |
| | | Oil / water separation effectiveness above 75% of the nominal parameters. | 2 |
| | | Oil / water separation effectiveness not proven. | 1 |
| | | Oil /water separation system not operational due to technical failure or lack of skilled personnel to execute the process. | 0 |

Table 9 Crew – Performance scoring

| <i>Personnel</i> | <i>Subject</i> | <i>Result</i> | <i>Score</i> |
|---------------------------------|---|---|--------------|
| Deck crew | General safety of the equipment operations | PPE above standards. Proven safety training, safety briefing before operations. No risk observed during operations. | 4 |
| | | Standard PPE, Safety briefing, No risk observed. | 3 |
| | | Basic PPE and safety rules applied. No risk observed. | 2 |
| | | Risk observed during some operations. | 1 |
| | | Lack of PPE and risky equipment manning. Accident. | 0 |
| | Theoretical training | All OPR personnel trained and certified. | 4 |
| | | Key personnel trained and certified. | 3 |
| | | Key personnel trained but not certified. | 2 |
| | | Lack of proof of the required theoretical training of the crew. | 1 |
| | | Lack of proof of the required theoretical training of the deck and bridge crew. | 0 |
| | On deck co-ordination | Excellent co-ordination. Quick and effective reactions. | 4 |
| | | Good co-ordination. Effective reaction to the problems arising. | 3 |
| | | Basic co-ordination provided. | 2 |
| | | Lack of appropriate co-ordination causing significant problems with achieving the drill objectives. | 1 |
| | | Lack responsible person, lack of co-ordination causing not achieving the drill objectives. | 0 |
| Spill response co-ordinator | Spill response co-ordination on the bridge | Excellent co-ordination visibly enhancing good performance during the drill in difficult conditions. | 4 |
| | | Good co-ordination visibly enhancing good performance during the drill in normal conditions. | 3 |
| | | Co-ordination sufficient to achieve the drill basic objectives. | 2 |
| | | Poor co-ordination causing failure of some drill elements. | 1 |
| | | Lack of co-ordinator. The vessel's master taking role of co-ordinator. | 0 |
| | Communication with the deck crew and other vessels | Excellent communication skills presented in the stressful environment. | 4 |
| | | Good communication skills presented in normal conditions visibly enhancing the performance during the drill. | 3 |
| | | Communication sufficient to achieve basic drill objectives. | 2 |
| | | Problems with communication leading to failure of some drill elements. | 1 |
| | | Failure of communication. | 0 |
| Captain | Co-operation with the spill response co-ordinator | Excellent co-operation visibly enhancing good performance during the drill in difficult conditions. | 4 |
| | | Good co-operation facilitating the drill performance in normal conditions. | 3 |
| | | Sufficient co-operation ensuring achievement of the basic objectives of the drill. | 2 |
| | | Insufficient level of co-operation causing difficulties in achieving objectives of the drill. | 1 |
| | | Lack of co-operation leading to the failure of the drill. | 0 |
| | Co-operation with the skipper of the boom towing boat | Excellent co-operation visibly enhancing boom towing performance during the drill in difficult conditions. | 4 |
| | | Good co-operation facilitating the boom towing performance in normal conditions. | 3 |
| | | Sufficient co-operation ensuring achieving and maintaining desired shape of the boom for at least 0.5 hours. | 2 |
| | | Insufficient co-operation causing problems in maintaining desired shape of the boom. | 1 |
| | | Lack of co-operation leading to the failure of the drill. | 0 |
| Skipper of the boom towing boat | Boom towing | Excellent skills presented during adverse weather conditions. | 4 |
| | | Good skills presented during normal conditions. | 3 |
| | | Skills sufficient to achieve basic objectives of the drill. | 2 |
| | | Lack of skills, a risk of damage or loosing of the equipment | 1 |
| | | Lack of skills leading to damage or loosing of the equipment | 0 |

Table 10 Management – Performance scoring

| Action | Subject | Result | Score |
|------------------|--|---|-------|
| Drill Management | Notification procedure | IRC signed and sent to MS by the contractor immediately after the notification by EMSA. | 4 |
| | | IRC signed and sent to MS by the contractor within the time shorter than 1 hour from the notification by EMSA. | 3 |
| | | IRC signed and sent to MS by the contractor within the time shorter than 2 hours from the notification by EMSA. | 2 |
| | | IRC signed and sent to MS by the contractor within the time exceeding 2 hours from the notification by EMSA. | 1 |
| | | IRC not signed by the contractor. | 0 |
| | Accommodation for the EMSA observer | Excellent accommodation. Separate cabin and meals provided. | 4 |
| | | Good accommodation (e.g. meals provided.) | 3 |
| | | Sufficient accommodation. | 2 |
| | | Poor accommodation (e.g. basic hygienic standards not kept). | 1 |
| | | Lack of accommodation. Inhospitable atmosphere. | 0 |
| | Communication | Notification including detailed information on the drill scenario with justification of the particular elements and definition of the drill objectives. | 4 |
| | | Notification including detailed information on the drill scenario. | 3 |
| | | Sufficient notification. | 2 |
| | | Delayed notification. | 1 |
| | | Lack of notification. | 0 |
| | Drill scenario | Scenario agreed with EMSA. Innovative scenario taking into account week elements of the previous drills and elements not exercised previously. | 4 |
| | | Scenario agreed with EMSA. Innovative scenario taking into account week elements of the previous drills. | 3 |
| | | Scenario agreed with EMSA. | 2 |
| | | Scenario not agreed with EMSA, not in agreement with EMSA request. | 1 |
| | | Lack of a written scenario. | 0 |
| | Briefing | Comprehensive briefing including detailed instructions on the actions for each particular participant of the drill. | 4 |
| | | Comprehensive briefing including general instructions for the drill participants. | 3 |
| | | Basic information provided to all drill participants. | 2 |
| | | Insufficient briefing. Key personnel not participating, Inadequate information. | 1 |
| | | Lack of briefing. | 0 |
| Debriefing | Comprehensive debriefing including detailed comments on the actions of each particular participant of the drill and plan for improvements. | 4 | |
| | Comprehensive debriefing including detailed comments on the actions of each particular participant of the drill. | 3 | |
| | Basic information and conclusions provided to all drill participants. | 2 | |
| | Insufficient debriefing. Key personnel not participating, Inadequate information and conclusions. | 1 | |
| | Lack of debriefing. | 0 | |

Annex 2: Examples of the documents sent by EMSA to the Contractor during Notification Exercises

This annex contains examples of the following documents:

1. Notice of Pollution Response
2. Incident Response Contract (commonly referred to as the IRC)

EXERCISE, EXERCISE, EXERCISE

Template 1

| NOTICE OF POLLUTION RESPONSE | |
|---|---|
| Recipient | |
| Date | |
| Fax Number | |
| E-mail | |
| Ref. Number | |
| Notice | Under Article III.3.2 of the Vessel Availability Contract _____, EMSA hereby requests _____ to enter into the Incident Response Contract with [Click here and type name of the Requesting State]. |
| CONTACT DETAILS OF THE REQUESTING STATE | |
| Name of the Institution | |
| Name of the Responsible Person | |
| Fax Number | |
| Telephone Number | |
| E-mail | |
| ASSISTANCE REQUEST | |
| Type of assistance requested | |
| Vessel/s | |
| Equipment | |
| INCIDENT DESCRIPTION | |
| Type of incident | |
| Location | |
| Type and quantity of oil spilled | |
| Vessel/s involved in the incident | |

| EMSA CONTACT DETAILS | |
|-----------------------|--|
| Unit C.1 Contact Name | |
| Telephone Number | |
| E-mail | pollution.emergency@emsa.europa.eu |

On the attached Contract Form (Attachment 1), please fill in boxes B3. Sign the Contract and then send to [Click here and type name of Requesting State] so they can proceed with the remainder.

When signed by both parties a copy of the Contract must be sent to EMSA.

For any further information please contact EMSA Unit C.1.

Yours sincerely,

Frédéric Hébert
Head of Unit C.1
Pollution Preparedness and Response

Attachment: Incident Response Contract Form

ANNEX 2

INCIDENT RESPONSE CONTRACT (IRC) - VESSEL FORM

A. Vessel Information

A.1. General Information

| | |
|------------------------|------------------------------------|
| Name: | IMO Number: |
| Flag: | Place of Registry: |
| Vessel's Owner: | Vessel's Technical Manager: |

A.3. Financial Information

| | |
|--|--|
| A.3.1. Daily Operational Hire: EUR [TBC in words] Per calendar day pro rata [TBC in figures] | A.3.2. Daily Non-operational Hire: EUR [TBC in words] Per calendar day pro rata [TBC in figures] |
|--|--|

B. Contractor

| | |
|--|---|
| Name: | |
| B.1. Operational Contact Details | B. 2. Administrative Contact Details <i>(Notices, Invoices, other)</i> |
| Name: | Name: |
| Full Address: | Full Address: |
| Tel. (24/7): | Tel. (24/7): |
| Fax: | Fax: |
| E-mail: | E-mail: |
| Mobile of onshore responsible person: | Mobile of onshore responsible person: |
| B.3. Operational Details | B.4. Financial Details: Bank Account |
| Port of Departure: | Name of the Bank: |
| Estimated Time to be Ready to Sail: | Account Holder: |
| Place of Redelivery: | Full Account Number including codes: |
| | Address of the branch in full |

| | |
|---|--|
| C. Equipment (<i>Option chosen by the requesting party</i>) | |
| C.1. Mechanical Recovery (<i>The equipment I & II is included in all options for Mechanical Recovery</i>) | |
| [Options below to be completed with the list of the main oil pollution response equipment systems carried on board the vessel at the same. Depending on the arrangement, there could be more than two options.] | |
| Option C.1.1 <input type="checkbox"/> | Option C.1.2 <input type="checkbox"/> |
| Oil Pollution Response Equipment and Crew on board (24h) | |
| D. Requesting Party | |
| Requesting State: | |
| D.1. General Contact Details | D.2. Administrative Contact Details (<i>Notices, Invoices, other</i>) |
| Government body representing the Requesting State: | Name: |
| Full Address: | Full Address: |
| Tel. (24/7): | Tel. (24/7): |
| Fax: | Fax: |
| E-mail: | E-mail: |
| Mobile : | Mobile : |
| D.3. Contact Details Supreme on Scene Commander (SOSC) or equivalent | D.4. Other Details |
| Name: | Place of Delivery: |
| Tel: | Court for Disputes: |
| Fax: | |
| E-mail: | |
| E. Signature | |
| E.1. Contractor's Representative Signature: | E.2. Requesting State's Representative Signature: |
| <i>Name, Position & Signature:</i> | <i>Name, Position & Signature:</i> |
| <i>Place, Date & Time (UTC)</i> | <i>Place, Date & Time (UTC)</i> |

The technical data sheet of the vessel and equipment is always a part of the IRC-V

Vessel Info Sheet (to be attached)

The technical data sheet of the vessel and equipment is always a part of the IRC-V.

Annex 3: Quarterly Drill Report Template

| Quarterly Drill Report Template | | | | | |
|--|------------|----------------------------|---------------------------------|------------------|-------------------------|
| Contractor | VAC Number | Area | No. of drill/year | Date of drill | |
| | | | | | |
| 1. Preface | | | | | |
| <i>Description of the main tasks and goals of the drill such as: deployment of oil spill response equipment, testing heating system, pumping capacity, decanting and discharging arrangements.</i> | | | | | |
| 2. Drill Scenario | | | | | |
| <i>Description of the drill scenario e.g. type of accident, type and quantity of oil spilled, position, task given to EMSA vessel, relevant response actions, equipment was deployed during the drill.</i> | | | | | |
| 3. Drill Area | | | | | |
| <i>Description of the area where the drill was performed, stating position and/or distance and direction from the nearest shore, other related particulars. A map could be presented as an attachment.</i> | | | | | |
| 4. Participants | | | | | |
| 4.1 Personnel | | | | | |
| 4.1.1 From Contractor's side - key figures | | | | | |
| Name | Rank | Key tasks during the drill | No. of previous drills attended | IMO Course level | Date of IMO certificate |
| | | | | | |
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| | | | | | |
| | | | | | |
| 4.2. Observers | | | | | |
| 4.2.1 From EMSA (names) | | | | | |
| 4.2.2 Others (names, organization) | | | | | |
| 4.3. Vessels | | | | | |
| 4.3.1 OSR vessel(s) | | | | | |
| 4.3.2 Supporting vessels (e.g. tug boats) | | | | | |

| 5. Weather conditions | | | | | | |
|---|-----------------------|--------------------|------------------|-----|-------------------|------------------------|
| Wave height [m] | Wind [m/sec or B°] | Current [m/sec] | Temperature [°C] | | Visibility | Time period [hh:mm] |
| | | | Water | Air | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 6. Detailed Timetable | | | | | | |
| <p>An example of detailed timetable is presented in Annex 1 to the present Quarterly Drill Report. The timetable should reflect all the key elements of the drill with the exact timing. The timetable should be attached to the drill report as an annex.</p> <p>Remarks (if any):</p> | | | | | | |
| 7. Evaluation and conclusions | | | | | | |
| <p>Assessment of the drill performance (including vessel, crew and equipment), analysis, comparison with previous drills results, based on the criteria described in the guidelines</p> | | | | | | |
| 8. Shortcomings | | | | | | |
| <p>Summary of the difficulties met during the drill execution, including those from technical, organisational, logistical, human or other nature.</p> | | | | | | |
| 8.1 Failure of equipment | | 8.2 Safety issues | | | 8.3 Human element | |
| | | | | | | |
| 9. Validity of the equipment insurance policy | | | | | | |
| Date: | | | | | | |
| 10. Proposals for improvement/Follow-up actions | | | | | | |
| <p>Explanation of reasons for failure of the equipment. Suggestions for improvements of the drill performance related to the above mentioned bottlenecks, stating clear timeline/deadlines for their execution.</p> | | | | | | |
| 11. Future drill considerations | | | | | | |
| <p>Any other considerations which might be taken into account for the future drills.</p> | | | | | | |
| Name and signature of person preparing the report | | | | | Date [dd/mm/yyyy] | |
| | | | | | | |

Documents supporting the Report should include:

- Photos from the drill (or video)
- Copies of the vessel log books (pages related to the drill)
- Crew list
- Drill programme

Annex 4: Exercise Report Template

| Pollution Response Exercise Report Template | | | | |
|--|--------------------------|--|---|---|
| Contractor | VAC Number | Name of the Exercise | Host country | Date(s) of the Exercise [dd/mm/yyyy] |
| | | | | From / / To / / |
| 1. Introduction | | | | |
| <i>Short description of the main tasks and goals of the Exercise, organising authority(ies), other participating entities</i> | | | | |
| 2. Exercise Scenario | | | | |
| <i>Short description of the Exercise scenario e.g. type of accident, type and quantity of oil spilled, position, relevant response tasks given by the organisers to the vessel (s) (e.g. which OSR equipment to be deployed during the Exercise, 'open ship' event, another tasks)</i> | | | | |
| 3. Exercise Area | | | | |
| <i>Short description of the area where the Exercise was performed, stating position(s) and/or distance and direction from the nearest shore, other related particulars. A map could be presented as an attachment.</i> | | | | |
| 4. Parties involved | | | | |
| 4.1 State or other organization | | 4.2 OPR Vessel(s) or other means (e.g. aircraft, equipment etc) | | |
| | | | | |
| 4.3 EMSA OPR arrangement | | | 4.4. Persons onboard the vessel | |
| 4.3.1 From Contractor's side – key persons a) <i>Oil Spill Response Coordinator</i> b) <i>Master</i> c) <i>Deck Coordinator</i> d) <i>Crew members operating OSR equipment (name, position, key tasks)</i> | | | 4.4.1 From EMSA (name) 4.4.2 From the Member State (name, organization, e.g. liaison officer) 4.4.3 Others (name, organization, e.g. visitors) | |
| 4.3.2 Other operational persons (name, organization, position, key tasks) | | | 4.5 Vessels | |
| | | | 4.5.1 Contractor's OSR vessel(s) 4.5.2 Supporting vessels for deployment of OPR equipment (e.g. tug boat) | |
| 5. Notification Exercise (communication test), if applicable | | | | |
| Warning of Pollution Incident Form | | Notice of Pollution Response + Incident Response Contract Form | | |
| Received from EMSA | Sent back to EMSA | Received from EMSA | Sent to the Member State | Received from the Member State |
| Date / Time : | Date / Time : | Date / Time : | Date / Time : | Date / Time : |
| Note: <i>Please present the figures in the above cells using the following format: Date [dd/mm]; Time [hh:mm], UTC</i> | | | | |
| <i>Remarks (e.g. N.A. if there was no Notification Exercise carried out):</i> | | | | |

| 6. Weather conditions during the operational part of the Exercise | | | | | | |
|---|-----------------|-----------------|------------------|-----|--------------------|-------------------------|
| Date [dd/mm] | Time [hh:mm] | Wind [m/sec] | Temperature [°C] | | Current [m/sec] | Visibility [m or km] |
| | | | Water | Air | | |
| / | : | | | | | |
| / | : | | | | | |
| / | : | | | | | |
| / | : | | | | | |
| / | : | | | | | |

7. Detailed Events Log
The Detailed Events Log should be attached as Annex 1 to the present Exercise Report. The Detailed Events Log should reflect all the key events during the exercise.
Remarks (if any):

8. Evaluation and conclusions
Assessment of the Exercise performance (including vessel, crew and equipment).

9. Shortcomings
Summary of the difficulties met during the Exercise performance, including those from technical, organisational, logistical, human or other nature.

| 9.1 Failure of equipment | 9.2 Safety issues | 9.3 Human element | 9.4 Communication and coordination |
|--------------------------|-------------------|-------------------|------------------------------------|
| | | | |

10. Proposals for improvement/Follow-up actions
Explanation of reasons for failure of the equipment. Suggestions for improvements of the Exercise performance related to the above mentioned bottlenecks, stating clear timeline/deadlines for their execution.

11. Financial/reimbursement section
The following documents should be included as annexes to the present Exercise report, as follows:
Annex 2 - Voyage Analysis (please use the table in xls format given as an example. This document should be coordinated in advance with the relevant EMSA Project Officer)
Annex 3 - Bunker delivery Note/invoice (stating the price of the fuel)
Annex 4 - Invoice. This document should be coordinated in advance with the relevant EMSA Project Officer
Other documents, if applicable.
Remarks (if any):

12. Other remarks/considerations
Any other considerations which might be taken into account for the future Exercises.

| Name of the person preparing the report | Signature | Date [dd/mm/yyyy] |
|---|-----------|----------------------|
| | | / / |

Annex 5 Voyage analysis example

| M/T XXX - Oil Pollution Response Exercise - DAILY RATE ANALYSIS | | | | | | | | |
|---|------------|----------|-------------------------------|-------|------|-----------------|--------------|------------------|
| DATE | FROM HH.MM | TO HH.MM | DETAILS | HOURS | DAYS | % OF DAILY RATE | DAILY RATE € | TOTAL COST |
| 31/10/2009 | 18:00 | 23:59 | Loading the equipment | 05:59 | 0.25 | 75% | 5,000 | 934.90 |
| 31/10/2009 | 00:00 | 06:00 | Loading the equipment | 06:00 | 0.25 | 75% | 5,000 | 937.50 |
| 01/11/2009 | 06:00 | 23:59 | Sailing from xxx to yyy | 17:59 | 0.75 | 75% | 5,000 | 2,809.90 |
| 02/11/2009 | 00:00 | 23:59 | Sailing from xxx to yyy | 23:59 | 1.00 | 75% | 5,000 | 3,747.40 |
| 03/11/2009 | 00:00 | 10:00 | Sailing from xxx to yyy | 10:00 | 0.42 | 75% | 5,000 | 1,562.50 |
| 03/11/2009 | 10:00 | 23:59 | In port alongside - Open ship | 13:59 | 0.58 | 75% | 5,000 | 2,184.90 |
| 04/11/2009 | 00:00 | 05:00 | In port alongside | 05:00 | 0.21 | 75% | 5,000 | 781.25 |
| 04/11/2009 | 05:00 | 14:00 | Operational Exercise | 09:00 | 0.38 | 75% | 5,000 | 1,406.25 |
| 04/11/2009 | 14:00 | 23:59 | Sailing from yyy to xxx | 09:59 | 0.42 | 75% | 5,000 | 1,559.90 |
| 05/11/2009 | 00:00 | 23:59 | Sailing from yyy to xxx | 23:59 | 1.00 | 75% | 5,000 | 3,747.40 |
| 06/11/2009 | 00:00 | 18:00 | Sailing from yyy to xxx | 18:00 | 0.75 | 75% | 5,000 | 2,812.50 |
| 07/11/2009 | 18:00 | 23:59 | Unloading the equipment | 05:59 | 0.25 | 75% | 5,000 | 934.90 |
| 08/11/2009 | 00:00 | 06:00 | Unloading the equipment | 06:00 | 0.25 | 75% | 5,000 | 937.50 |
| TOTAL DAILY RATE COST | | | | | | | | 22,484.38 |

| FUEL COST ANALYSIS | | | | | | | | |
|------------------------|------------|----------|-------------------------------|-------|--------------------------|------------------------|--------------------|------------------|
| DATE | FROM HH.MM | TO HH.MM | DETAILS | HOURS | CONSUMPTION PER DAY (TN) | % OF DAILY CONSUMPTION | PRICE PER TON IN € | FUEL COST € |
| 31/10/2009 | 18:00 | 23:59 | Loading the equipment | 05:59 | 0.75 | 0.19 | 500 | 93.49 |
| 31/10/2009 | 00:00 | 06:00 | Loading the equipment | 06:00 | 0.75 | 0.19 | 500 | 93.75 |
| 01/11/2009 | 06:00 | 23:59 | Sailing from xxx to yyy | 17:59 | 10.00 | 7.49 | 500 | 3,746.53 |
| 02/11/2009 | 00:00 | 23:59 | Sailing from xxx to yyy | 23:59 | 10.00 | 9.99 | 500 | 4,996.53 |
| 03/11/2009 | 00:00 | 10:00 | Sailing from xxx to yyy | 10:00 | 10.00 | 4.17 | 500 | 2,083.33 |
| 03/11/2009 | 10:00 | 23:59 | In port alongside - Open ship | 13:59 | 0.75 | 0.44 | 500 | 218.49 |
| 04/11/2009 | 00:00 | 05:00 | In port alongside | 05:00 | 0.75 | 0.16 | 500 | 78.13 |
| 04/11/2009 | 05:00 | 14:00 | Operational Exercise | 09:00 | 10.00 | 3.75 | 500 | 1,875.00 |
| 04/11/2009 | 14:00 | 23:59 | Sailing from yyy to xxx | 09:59 | 10.00 | 4.16 | 500 | 2,079.86 |
| 05/11/2009 | 00:00 | 23:59 | Sailing from yyy to xxx | 23:59 | 10.00 | 9.99 | 500 | 4,996.53 |
| 06/11/2009 | 00:00 | 18:00 | Sailing from yyy to xxx | 18:00 | 10.00 | 7.50 | 500 | 3,750.00 |
| 07/11/2009 | 18:00 | 23:59 | Unloading the equipment | 05:59 | 0.75 | 0.19 | 500 | 93.49 |
| 08/11/2009 | 00:00 | 06:00 | Unloading the equipment | 06:00 | 0.75 | 0.19 | 500 | 93.75 |
| TOTAL FUEL COST | | | | | | | | 24,198.87 |

| | | | | | | | | |
|--------------------|--|--|--|--|--|--|--|------------------|
| GRAND TOTAL | | | | | | | | 42,467.62 |
|--------------------|--|--|--|--|--|--|--|------------------|

Completed table must be sent by email to EMSA project officer for co-ordination.

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