Information Meeting
EMSA NEG/1/2013 – Stand-by Oil Spill Recovery Vessels

Introduction to EMSA’s At-sea Oil Recovery Service

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**Background:**
- Post Erika (2002: EMSA established)
- Post Prestige (2004: new task Marine Pollution Preparedness & Response)

**Decentralised Agency of the European Community**
- Own legal identity
- No legislative role
- Technical and operational support

**Legal basis**
Regulation 1406/2002 as amended
Framework for Service Network of Stand-by Oil Spill Response Vessels

• “Top-up” Member States pollution response capabilities
• “European Tier” of resources
• Mobilisation by EMSA at request of MS/EFTA/CC or Commission
• Channelled through “EU Community Mechanism”
• Monitoring and Information Centre (MIC) managed by DG ECHO
• Under “operational control” of the affected coastal State
Scope of the work

Main Objective:
Stand-by At-sea Oil Recovery Service

Contractor to ensure that:
• Vessel undertakes normal commercial activities; and
• At request, transformed & mobilised at short notice for at-sea oil recovery services
Dual Contract Structure

Vessel Availability Contract

Incident Response Contract

At-sea Oil Recovery Service
• Between EMSA and the Contractor
  – 4 Years + Renewable once = Maximum 8 years total
• It secures:
  – Requirements for vessel(s), equipment and crew
  – Stand-by / availability
  – Drills and participation in exercises
  – Mobilisation time
  – Mandatory use of the Incident Response Contract
Pre-fixed contract with pre-set conditions & tariffs:

- Between the requesting coastal State and contractor
- Avoid unnecessary high tariffs vs. vessel of opportunity
- 1 Model Contract for 20+ different legal systems
IRC: Some key provisions

• Clear allocation of **responsibilities** during operation
  – Under operational command of the MS (SOSC)
  – National officer on board
  – Safety responsibility: Master (Final)

• **Period:** 21 Days: “window of opportunity” / economic commitments of operator

• **Costs**
  – 2 daily rates (operation/stand-by)
  – Operational costs (fuel)
  – Cleaning

• **Renewal possible under same conditions**
Tankers

Icebreaker

Supply Vessels

Dredgers
Tankers - Advantages

• Large storage capacity – (EMSA largest is 7,400m³)

• Prepared to deal with oil (heating, filling, discharging)

• Flexibility for decanting

• Flashpoint

• Unrestricted sea-going service
Tankers - Disadvantages

- Space on deck
- Speed
- Low speed
- Manoeuvrability
- Crew number
- Accommodation
Offshore Supply Vessels - Advantages

• Deck Space
• Equipment Deployment
• Less pre-fitting for installing equipment
• Manoeuvrability and Low Speed
• Speed
• Visibility
• Accommodation for EMSA, liaison officers
Offshore Supply Vessels - Disadvantages

• Storage capacity limited to 1,000 – 1,500m³

• Bad weather – swell washes the aft with oil (slippery)

• Good weather – dirty equipment – oil spreads quickly

• Flashpoint

• Significant pre-fitting (e.g. piping and heating)
Sweeping arms

Booms

Skimmer

Oil Slick Radar
As of 1 January 2013

Legend
- Home Base
- Response Vessel
- Response Vessel (prep. phase)
- EU Member States
- EU Accessing Countries
- EFTA/EEA Coastal Countries
- Candidate Countries

Notes:
1) Iceland is also an EU Candidate Country
2) FYROM - The former Yugoslav Republic of Macedonia
3) Kosovo - This designation is without prejudice to positions on status, and is in line with UN SCR 1244/99 and the ICJ Opinion on the Kosovo declaration of independence
Setting-up the Service

Preparatory Phase

• Purchase of oil spill response equipment
• Pre-fitting the vessel for equipment installation
• Crew Training

Stand-by phase

• Vessel available to respond
• Drills and Exercises
• Mobilisation (24 hrs.)
Preparatory Phase: Challenges

- Pre-fitting, conversion works
- Purchase and installation of OPR equipment
- Mobilisation Plan, Operational Procedures
- Crew Training
- Certification by Classification Society (Class Notation)
- Acceptance Test
Stand-by Phase: Drills

Quarterly - 4 times a year

**Scope:**

- To verify the level of readiness of vessels, crews and response equipment
- To train crews in oil pollution response: equipment operation, co-operation with other units at sea etc.
Stand-by Phase: Exercises

**Type:**
- Notification
- Operational (10 days/year)

**Scope:**
- Integration of EMSA vessels in Command and Control Structures
- Co-operation with participant Units
- Internal and External level of Coordination
Financial Elements

- **Preparatory Phase** - Pre-financing available from EMSA
  1) Oil Spill Response Equipment
     - Purchasing - Pre-financing up to 100 %
  2) Pre-fitting Vessels (e.g. for equipment installation)
     - Pre-financing up to 80 %
     - Remaining 20% paid when vessel operational/stand-by phase

- **Stand-by phase**
  3) Vessel Availability Fee (covers drills)

- **Additional Payments**
  4) At-sea Exercises: Daily rate + Fuel
  5) Pollution Response Incident: Daily rate + Fuel
ABOUT THE VESSEL - Aktos OSRV

The Aktos OSRV’s commercial activity is oil trading.

IMONumber: 8801321
Flag State: Greece
Port of Registry: Piraeus
Type: Oil Taker
Built: 1969
Length: 79.53 m
Breadth: 12.60 m
MaxDraft: 6.20 m
DWT: 2501 Ton
Gross Tonnage: 1544 Ton
Storage capacity: 3000 m³
Heeling capacity: 3000 kW
Pumping capacity: 1000 m³
Flash Point: >60°C
Propeller: Cast-iron Fixed Pitch Propeller
Bow Thruster: Yes
Max. speed: 12.6 knots
Classification Society: Lloyd's Register

EQUIPMENT STOCKPILE

- Sweeping arms
- Foil skimmers
- Markleen boom
- Norman Multiskimmer

ADVANTAGES OF RESPONSE SYSTEMS

- State of the art equipment which provides good effectiveness for pollution response
- Flexibility of the response systems allows different operational configurations
- Sweeping arms tailored for recovery of heavy viscos oils

FOR MORE INFORMATION: www.emsa.europa.eu
KOSEQ SWEEPING ARM SYSTEM

GENERAL DESCRIPTION

The Koeseq rigid sweeping arm system consists of a sweeping arm structure with foldable ends, oil transfer pumps, ancillaries, control panel, oil and hydraulic hoses, crane and hydraulic power pack.

The sweeping arm system is supplied with an integrated weir skimmer and centrifugal pump with screw impeller, Marflex HSP 150-63, pre-installed with a hot water current racial system to facilitate pumping of high viscosity oil. A brush cassette with a moveable debris screen can also be used for the recovery of high viscosity oil. The system is equipped with a remotely controlled self-cleaning grating to prevent debris to obstruct the skimmer and the pump.

The oil collecting system consists of two sweeping arms, with a total length of either 12 or 15 meters. The sweeping arm is launched by means of a crane or a derrick on the vessel. Two Lagedijk cranes specially designed for this purpose, are most commonly used to operate the sweeping arms.

The oil/water mixture is guided along the bulkheads of the sweeping arm and the side of the vessel via an adjustable debris screen to the oil collecting chamber of the inner pontoon, from which it is removed by a hydraulically driven portable submersible cargo oil pump and discharged into the oil collecting tanks via a flexible hose.

The vessel equipped with the sweeping arm is capable to remove oil from the sea up to Beaufort 5. The current between vessel and oil slick must be up to 2 knots and the forward speed of the vessel should be maximum 4 knots.

KEY CHARACTERISTICS:

- Rigid sweeping arm with length of 12/15 m with a foldable end
- Lifting crane/derrick
- Web skimmer module with a centrifugal pump using a hot water current racial system
- Brush skimmer module with a PDAS pump
- Remotely controlled debris screen

TECHNICAL SPECIFICATIONS - 12 / 15 METER SWEEPING ARM

<table>
<thead>
<tr>
<th>Parameter</th>
<th>12 METER</th>
<th>15 METER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Length</td>
<td>11974/15115 mm</td>
<td>22974/15115 mm</td>
</tr>
<tr>
<td>Overall Width</td>
<td>3412/3330 mm</td>
<td>3412/3330 mm</td>
</tr>
<tr>
<td>Overall Height</td>
<td>1590/3336 mm</td>
<td>1590/3336 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>4300/4850 kg</td>
<td>4300/4850 kg</td>
</tr>
<tr>
<td>Operational temperature</td>
<td>-20°C to 60°C</td>
<td>-20°C to 60°C</td>
</tr>
<tr>
<td>Operational window</td>
<td>up to Beaufort 5</td>
<td>up to Beaufort 5</td>
</tr>
<tr>
<td>Recovery speed</td>
<td>up to 4 knots</td>
<td>up to 4 knots</td>
</tr>
<tr>
<td>Deployment time</td>
<td>approx. 10 min. each arm</td>
<td>approx. 10 min. each arm</td>
</tr>
</tbody>
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FOR MORE INFORMATION: www.emsa.europa.eu
Thank you for your attention

Further information: