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**
Dredgers

Tankers

Supply Vessels

Icebreaker

Type of 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

Skimmer

Booms

Oil Slick Radar

Type of equipment
As of 1 January 2013

Legend
- Home Base
- Response Vessel
- EU Member States
- EU Accession 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 UNSCR 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 SERVICE
The arrangement includes a tanker, Aegae OSRV, trading in Greek waters and a stockpile permanently installed onboard.

The second vessel, Aegia I, is a back-up vessel equipped with a boom and a skimmer.

Environmental Protection Engineering is one of the major companies in the field of environmental protection in Greece and the wider area of the Eastern Mediterranean, with a variety of activities: marine pollution response, wreck removal, waste management, remediation and handling of polluted or destroyed seafarers.

EQUIPMENT STOCKPILE
Sweeping arms
Two Hydra rigid sweeping arms (15 m) with weir skimmer

Boom
Marklen single point inflation, 2x250 m (Uniboom X-1900)

Debris heavy duty boom, 2x250 m (Re-Beam 200X)

Skimmer
Foldable weir skimmer (185.2 ft)

High-capacity Orthoflote Multiskimmer (Normar 250 T)

Debris weir/fixed/float skimmer (Tarentola)

Slit detectors
Saab Aerostat of slit detection system

Additional equipment: Gas detector, Mini Lab, etc.

IMC Number: 8801321
Flag State: Greece
Port of Registry: Piraeus

Type: Oil Tanker
Built: 1969
Length: 76.52 m
Breadth: 12.40 m
Max Draft: 6.20 m
DWT: 2600 ton

Gross Tonnage: 1600 Ton

StORAGE CAPACITY: 3000 m³

Handling capacity: 3000 L/H

Pumping capacity: 1000 m³/h

Flash Point: < 60°C

Propulsion: Convertible Pitch Propeller

Bow Thruster: Yes

Max. speed: 12.6 knots

Classification Society: Lloyd’s Register

ABOUT THE VESSEL - Aegae I

The Aeage OSRV’s commercial activity is oil trading.

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 viscous oil
KOSEQ SWEEPING ARM SYSTEM

GENERAL DESCRIPTION

The Koeseq sweeping arm system consists of a sweeping arm structure with foldable arms, oil transfer pumps, auxiliaries, 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 HSP150-63, pre-installed with a hot water current racal 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 gutter 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 derrick on the vessel. Two Lagenjikj 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 arms 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
- Weir skimmer module with a centrifugal pump using a hot water radial system
- Brush skimmer module with a PDAS pump
- Remotely controlled debris screen

TECHNICAL SPECIFICATIONS - 12/15 METER SWEEPING ARM

- Overall Length: 11074/15155 mm
- Overall Width: 3412/3330 mm
- Overall Height: 5900/5336 mm
- Weight: 4300/4580 kg
- Operational Temperature: -20°C to 60°C
- Operational Window: up to Beaufort 5
- Recovery Speed: up to 4 knots
- Deployment Time: approx. 10 min each arm

FOR MORE INFORMATION: www.emsa.europa.eu
Network of Response Vessels: Quick facts

Number of vessels which can be mobilised simultaneously: 17

Average storage capacity per vessel for recovered oil: 3.674 m3

Network storage capacity, if 17 vessels are mobilised: 63,467 m3

Number of related equipment stockpiles: 15

Mobilisation time (vessel ready to sail to site) after signature of Incident Response Contract: 24 hours

Mobilisation procedure:
- Member States request assistance via the NMC
- Member States have operational control of the vessel during the incident

Number of regional or national at-sea exercises in which EMSA vessels were involved (2011): 11
Thank you for your attention

Further information: