

“NIRIIS 2011”

CYPRUS OIL POLLUTION
RESPONSE EXERCISE

with the participation of the
European Maritime Safety Agency
(EMSA)



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REPORT

“NIRIIS 2011” CYPRUS OIL POLLUTION RESPONSE EXERCISE

Limassol 4-6 October 2011

*By Nicos C. Attas
Marine Surveyor A'
Department of Merchant Shipping*

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PREFACE

The recent expansion of EMSA’s Network of Oil Recovery Ships to the Eastern Mediterranean Sea and the award of a 4-year service contract to the Cyprus based tanker “ALEXANDRIA” of Petronav Shipmanagement Ltd tops up remarkably the capability of the Republic of Cyprus to respond to a major oil pollution incident. However, at the same time it creates a compelling need to train the procedure for contracting the ship, operating her advanced technical oil containment and recovery abilities and coordinating her operations with the national response capacity.

The present exercise “NIRIIS 2011” is the first of this kind in Cyprus. We envisage to see this exercise become the begin of an annual event, the development of which, will enhance Cyprus’ s preparedness to respond to a major oil pollution emergency and to ensure that its seas and coastlines, which are of vital importance for the present and future generations, are adequately preserved and protected.

The Department expresses its sincere thanks to EMSA for its full support, valuable advises and of course for providing at its own cost the oil recovery vessel “ALEXANDRIA” to participate in this exercise.

This report wouldn’t be complete without having expressed our very special thanks to the participating Cyprus authorities, to Petronav Shipmanagement Ltd but also to the participating vessel and helicopter crew members for their unfailing commitment, devotion and professionalism. Grateful thanks are also expressed to the personnel of the Department of Merchant Shipping who helped and assisted in the organisation and execution of this exercise.

*Department of Merchant Shipping
Limassol, 24th November 2011*

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In Greek mythology, the “Nereids” (Ancient Greek: NIRIIDES) are sea nymphs, the fifty daughters of “Nereus” and “Doris”, sisters to “Nerites”. They often accompany Poseidon and can be friendly and helpful to sailors fighting perilous storms. They are particularly associated with the Aegean Sea, where they dwelt with their father in the depths within a silvery cave. The most notable of them are Thetis, wife of Peleus and mother of Achilles; Amphitrite, wife of Poseidon; and Galatea, love of the Cyclops Polyphemus.



*Sea thiasos for the wedding of Poseidon and Amphitrite,
2nd half of the 2nd century BC.*

Detail: Nereid on a sea-bull, bringing a present (source: Wikipedia)

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EXERCISE REPORT

COMMAND AND COORDINATION

The overall command and coordination of the exercise was with the Department of Merchant Shipping of the Ministry of Communications and Works.

OBJECTIVES

The exercise’s objectives were:

- To define duties and responsibilities at management level (to specify and train who does what);
- To examine mechanisms for decision making and for effective communication;
- To examine the procedure required for activation the European Union Civil Protection Mechanism (MIC) and EMSA Maritime Support Services, to contract an EMSA oil recovery vessel;
- To evaluate the coordination of oil spill response and recovery operations ;
- To identify any shortcomings and bottlenecks;
- To evaluate the “National Oil Spill Response Plan”

PLANNING

The planning included the drafting of a suitable and realistic TIER III oil spill scenario, the preparation of the exercise programme and the timetable and to specify the exercise location(s).

During the planning phase, the overall coordination and steering group responsibilities were defined. Two coordination and organizational meetings with all exercise participants were held, where relevant exercise handouts and scripted time intersections were handed over. The organisers, obtained in advance all required approvals and required budget.

SCENARIO

In the morning of Tuesday 4th of October 2011, at 05.30 local Cyprus time (UTC+3), the tanker “MED EXERCISE CARRIER” suffered serious structural damage while being en route from the Suez Canal to the island of Cyprus at the position **LAT: 34°23N, LON: 33°19E**. The tanker was bound to call the oil unloading facility of Vassilikos Power Plant in Cyprus, carrying a cargo of 20.000 Tons of Heavy Fuel Oil 380. The tanker suffered serious cracking on its hull in way of tank no. 6 that contained approximately 1.800 Tons of oil. There was an immediate release of 50 tons of Heavy FO. The master informed Cyprus Radio and Larnaca MRCC of the damage that created listing of the ship and a

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continuous oil flow into the sea. The position of the accident was approximately 22 nautical miles from the port and city of Limassol.

GENERAL PROGRAMME

The exercise’s general programme and timetable is presented in Appendix I.

EXERCISE SESSIONS

The exercise was performed in two sessions:

- (I) A **Notification Exercise** has been conducted on the 4th October 2011, through telephone and other communication means. The objectives were to test the procedures to alert and call out the response teams and the European Union Civil Protection Mechanism (MIC), the operators of shore installations (ports and marinas, naval bases, power stations, oil companies, water desalination plants, industrial installations), in accordance with the national oil spill combating plan. The coordination was assigned to Mr. Ioannis Efstratiou, Senior Marine Surveyor of the Department of Merchant Shipping.

- (II) An **Equipment Deployment Exercise** aiming to simulate the collection and combating of oil spills at sea with the use of ships, smaller craft, booms, skimmers and dispersant spraying. The coordination and at-sea-command was assigned to Mr. Nicos C. Attas, Marine Surveyor A’ to the Department of Merchant Shipping.

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PART I – NOTIFICATION EXERCISE (4TH OCTOBER 2011)

Communication with ports, marinas and operators of shore installations

The Notification Exercise was conducted through telephone, telefax and email, with the objective to test the procedures to alert and call out:

- the response teams,
- operators of shore installations, ports, marinas, naval bases, power stations, oil companies, water desalination plants, industrial installations,
- the European Union Civil Protection Mechanism (MIC)/EMSA Maritime Support Services (for ORV services),
- to raise awareness and to identify areas of improvement.

For this purpose, an alert message was published and sent by fax to a number of preselected recipients. Recipients were urged to take precautionary measures AND TO CONFIRM RECEIPT OF THE ALERT. Those who failed to reply within 30 minutes time, were alerted and contacted additionally by phone. All replies, non replies and any errors were assessed and recorded.

To make the exercise conditions more realistic, the organisers decided not to inform the preselected recipients in advance about the exercise. In fact, the majority of the recipients had not any feedback on the conduct of the exercise.

Communication with EU Monitoring and Information Centre (MIC) and EMSA

To train the procedure to alert EMSA Maritime Support Services and to request for EMSA oil recovery services, it has to go through the Monitoring and Information Centre (MIC), operated by the European Commission in Brussels. This task has been undertaken and carried out by the Cyprus Civil Defence, who, contacted and alerted the MIC and requested EMSA’s oil recovery services, upon receipt of a relevant notification by Limassol VTMIS.

A message was sent through the “Common Emergency Communication and Information System (CECIS)” as follows:

Occurrence: Date 4/10/2011 Time: 2.30 UTC

****THIS IS AN EXERCISE ** THIS IS AN EXERCISE**THIS IS AN EXERCISE**

“ This morning of Tuesday 4th of October 2011, at 05.30 local Cyprus time (UTC+3), the tanker “MED EXERCISE CARRIER” suffered serious structural damage while being en route from the Suez Canal to the island of Cyprus at the position LAT: 34°23N, LON: 33°19E. The tanker was bound to call the oil unloading facility of Vassilikos Power Plant in Cyprus, carrying a cargo of 20.000 Tons of Heavy Fuel Oil 380. The tanker suffered serious cracking on its hull in way of tank no. 6 that contained approximately 1.800 Tons

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of oil. There was an immediate release of 50 tons of Heavy FO. The master informed Cyprus Radio and Larnaca MRCC of the damage that created listing of the ship and a continuous oil flow into the sea. The position of the accident is approximately 22 nautical miles from the port and city of Limassol.

At 11.00 and following anew assessment of the situation, the Cyprus Oceanography Centre predicts that between the ship and the Limassol coast the average surface water currents are approximately 10 cm/s in a North Westerly direction and it is obvious that the oil slick will most probably reach the southern coasts of the Republic of Cyprus by the following 24 hours. According to a recent update, more than 600 tons flowed into the sea. The main oil slick stream was now clearly visible from the air and from ships and fishing vessels navigating in the nearby area. The vessel is still leaking large quantities of HFO.

The Republic of Cyprus herewith requests the EU Community Mechanism for Civil Protection to assist and provide oil recovery services via EMSA as soon as possible.”

Upon receipt of the alert by MIC and EMSA, Petronav Shipmanagement Ltd was asked by EMSA to provide the Incident Response Contract (IRC) to DMS for signature. DMS signed and forwarded the IRC to EMSA and Petronav.

RECORD OF ACTIONS CARRIED OUT DURING THE NOTIFICATION EXERCISE

The sequence of events, the timing and the required action for the notification exercise is described in a handout document which includes scripted time intersections as follows:

Time	Day: Tuesday 4 th October 2011	Action
0600	Ship in distress informs Cyprus Larnaca MRCC	---
0800	Begin of the exercise – Larnaca MRCC informs Limassol VTMISS at the Department of Merchant Shipping (DMS) at tel. 25 848 277, 25 848 131 and the Department of Fisheries and Marine Research (Tel. 22 807 867)	LCA MRCC
0805	VTMISS informs Nicos Attas (Tel. 96 56 00 20)	VTMISS
0805	VTMISS communicates with the ship in distress in order to collect as much information as possible – Usage of document “INCIDENT REPORT”	VTMISS
0810	Notification and alert of the “Oil Response Team”	Nicos Attas
0815	The “Oil Respond Team” communicates and alerts the Department of Fisheries and Marine Research (DFMR)	Nicos Attas
0830	DFMR activates National Oil Spill Combating Plan and sets vessels and equipment in alert	Director DFMR
0900	The ship in distress informs that the flow of HFO into the sea is continuous. Up to this point, appr. 600 tons of HFO have flown into the sea.	--

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0900	Decision to establish a Crisis Management Centre in Limassol VT MIS Centre within the DMS premises	DMS,DFMR
0905	Communication with the Marine Accident Investigation Division	VTMIS
0915	DFMR communicates with CY-Oceanography Centre and the Meteorology Service of the Republic of Cyprus to obtain sea state data.	Director DFMR
0915	DMS requests Larnaca MRCC to arrange helicopter for aerial surveillance and oil spill assessment over the affected sea area (FICTIVE-NO ACTION)	---
0930	NOTIFICATION EXERCISE (CYPRUS) Communication and alert of all operators of coastal installations (CPA, EAC, National Guard, Port and Marine Police, Desalination plants, marinas, etc.)	VTMIS
1000	Deadline for confirmation receipts from operators of coastal installations	Coastal installations
1000	VTMIS to communicate with the ship in distress for updating data and assessing anew the situation	VTMIS
1010	Ship in distress informs Cyprus VT MIS that she arranged for salvors to provide further assistance and does not require any assistance from the Republic of Cyprus	---
1015	DFMR reports that it has not the operational capacity and ability to deal with the quantity of oil at sea and informs DMS that international assistance will be necessary to deal with the HFO.	DFMR
1030	Director DMS informs Cyprus Civil Defence (CCD) to alert EU MIC and request for EMSA Oil Recovery Services	DMS
1100	Cyprus Civil Defence activates EU/EMSA assistance through CECIS	CCD
1110	DMS communicates directly with MIC/EMSA to confirm receipt of alert message via CECIS	DMS
1115	Director DMS informs Minister of Communications and Works and other political key players	Director DMS
1120	Cyprus Civil Defence and District Administrations confirm to set their services in alert	CCD, DA
1130	EMSA MSS confirm receipt of DMS request fax letter	EMSA
1200	Issue of navigational warning and Notice to Mariners	DMS-VTMIS
1300	EMSA informs Petronav on incident and Cyprus request	EMSA
1230	Press and Media Release	DMS
1310	Petronav sends IRC form to DMS	Petronav
1315	DMS signs IRC forms and transmits to EMSA, cc. Petronav	DMS
1410	EMSA confirms receipt of signed IRC form from DMS	EMSA
1430	END OF NOTIFICATION EXERCISE	DMS

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OUTCOME AND ASSESSMENT OF NOTIFICATION EXERCISE

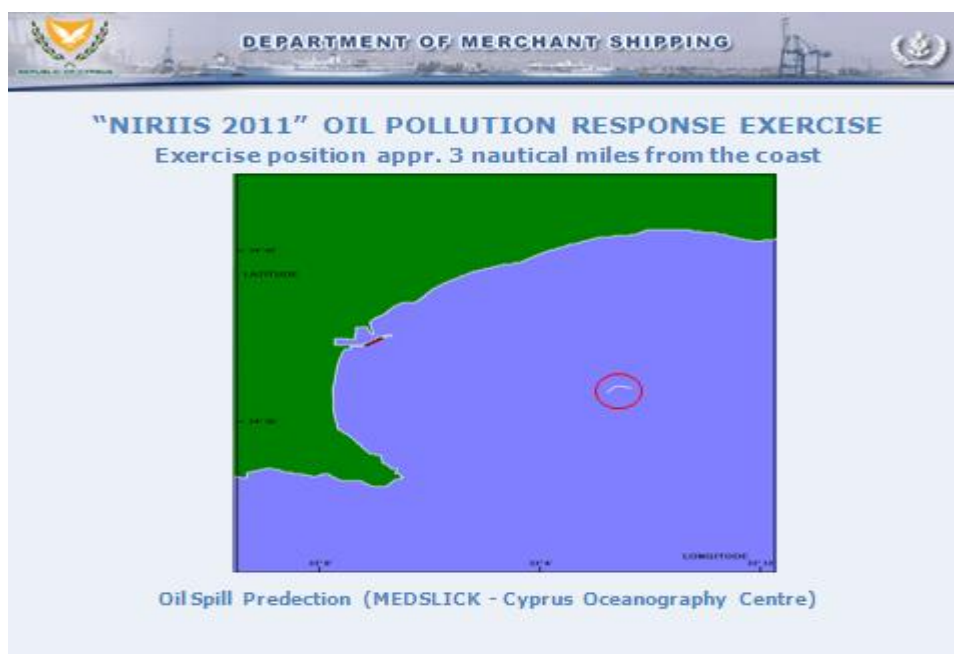
The result of the Notification Exercise was positive and was generally good. Out of 23 recipients, 21 replied in time, one failed to reply and one replied late.

- Problems have been encountered with some telephone and fax numbers which required to be corrected and updated, but this has been dealt with immediately and did not have any negative bearing in the sequence of events.
- Communication problems have been encountered with one government Department, who did not answer our repeated telephone calls. The management of this Department will be informed on this and correction action will be required.
- One shore facility (desalination plant) failed to reply to the alert message, and when asked why, replied that the operating personnel were not conversant with the Greek language. The management of this facility will be informed and required to take corrective action.
- The procedure to call out EMSA oil recovery services as established by the EU Commission and which has to go through the respective Civil Defence and CECIS is complex and time consuming. Our proposal is to try to simplify it by using only direct communication for the first notification, i.e. DMS with EMSA.

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PART II – AT SEA OIL RECOVERY OPERATIONS (6TH OCTOBER 2011)

In addition to the notification exercise, a practical session was performed during the morning of 6th October 2011 in the sea area out of Limassol’s coast. The central position of the exercise has been - **Lat: 34° 38’ N; Long: 33° 06’ E** – which is distanced appr. 3 nautical miles from the coast. According to MEDSLICK simulations (source: Cyprus Oceanography Centre), the evolution of the oil spill dispersion during 36 hours from the reported incident, is shown below.



During this exercise session, the EMSA contracted oil recovery vessel “ALEXANDRIA” deployed oil spill containment and recovery equipment at sea. National responders and government services supported “ALEXANDRIA” during the conduct of the exercise.

ON SCENE COMMAND (OSC) – AT SEA

According to a decision of the Director DMS, the at-sea on scene command was assigned to Mr. Nicos Attas, Marine Surveyor A’ to DMS.

PARTICIPANTS

The following entities and private companies participated in the exercise:

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PARTICIPANT	EQUIPMENT	TASK
DMS	NO	ON SCENE COMMAND
EMSA	“ALEXANDRIA”*	OIL RECOVERY OPERATIONS
PETRONAV	TUG “LAMBOUSA II”	ASSISTING
CPA	TUG “PRINIAS	ASSISTING
DFMR	M/P BOAT “AMFITRITI”	DISPERSANT SPRAYING
DFMR	INFL. BOAT “F.14”	PATROL -SAFETY OF NAVIG.
CYPRUS POLICE	PATROL BOAT “DIONYSOS”	PATROL-SAFETY OF NAVIG.
CYPRUS POLICE	HELICOPTER “AKRITAS”	COMMUNICATION AND OIL SLICK REPORT

**managed and operated by Petronav Shipmanagement Ltd.*

According to the scenario, a large part of the oil has reached the outer skirt of Limassol and is threatening to pollute public beaches and vital coastal installations such as power plants, the port and a pleasure yacht marina.

For this purpose, the EMSA oil recovery ship “ALEXANDRIA” arrived in the area at 07:00. At 07:15, a briefing onboard “ALEXANDRIA” was held with the purpose to assess the present situation and to agree on the best possible practice and necessary actions required for the recovery of the oil. Due to the availability of suitable tug and service vessels, it has been decided to deploy the vessel’s 500-metre long open sea boom in “U” form with an open end. The oil recovery to be performed with rigid sweeping arms. The deployment and handling of the boom was under the command of the shipmanagers of “ALEXANDRIA”, who were instructing the assisting tug boats “LAMBOUSA II” and “PRINIAS”.



Boom deployed in “U” form with an open end

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Upon securing the safety of navigation in the area, boom deployment started at 07:40 and was fully deployed and shaped by 09:30. The official begin of the at-sea operational exercise was ordered at 09:50.

During the exercise, a continuous communication was held at VHF channel 67 between the OSC, the ship’s Master, the VTMIS and with all participating vessels. Cyprus Oceanography Centre delivered updated data on current speed and direction, which were taken into consideration.

MRCC Larnaca responded to a request of the OSC for aerial support and surveillance and instructed a helicopter from the Police Air Operations Unit, to take off with the task to provide updated information on oil slick movement. Upon arrival of the helicopter at 10:20, the communication between the aerial unit with all participating ships and Limassol VTMIS was trained and tested.



Helicopter supports response coordination

During the recovery operations, “ALEXANDRIA” crew exercised also the determination of the flashpoint, viscosity and oil density of an oil sample taken from the contaminated sea. Also, the ppm content of the oily water was measured with the use of an oleometer installed onboard.

As it was foreseen by the scenario, the core operations were carried out by the oil recovery ship “ALEXANDRIA” which used both, its rigid sweeping arms and its open sea oil containment booms. Next to the “ALEXANDRIA”, the DFMR vessel “AMFITRITI”,

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trained the simulated use of chemical oil dispersants to dissolve smaller oil slicks in the nearby area.



“ALEXANDRIA” operating with deployed rigid sweeping arms

The exercise remained in full progress until 11:30. Upon ascertaining that the tasks and objectives set during this on scene exercise were fulfilled, the OSC announced the end of at sea oil recovery operations.

DEBRIEFING AND EVALUATION

A debriefing meeting was held onboard between the OSC, EMSA and Petronav. During the meeting, the masters of the participating ships were asked to report any comments or remarks they may had about the performance or the execution of the exercise. The meeting agreed that:

- The exercise was successful;
- The objectives were fulfilled;
- The plan and at sea operations were performed within the time schedule;
- The participating crews showed high degree of devotion and professionalism.

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RECORD OF ACTIONS CARRIED OUT DURING THE OIL RECOVERY AT SEA EXERCISE

Time	Day: Thursday 6 th October 2011	Action
0630	Departure of “ALEXANDRIA” and LAMBOUSA II” to exercise area	PETRONAV
0715	On board briefing and coordination meeting	OSC/ALL
0730	Exercise begin	OSC
0745	Deployment of oil containment boom	PETRONAV
0800	Departure of tug boat “PRINIAS”	CPA
0800	Arrival of DFMR vessels “AMFITRITI” and “F.14”	DFMR
0830	Arrival of Marine Police vessel “DIONYSOS”	Marine Police
0900	OSC requests aerial surveillance to assess situation and communicates with Limassol VTMISS	OSC
0905	Limassol VTMISS communicates with Larnaca MRCC to request the use of a helicopter for aerial surveillance of the area	VTMISS
0915	CPA’s Tug boat "PRINIAS" arrives on scene to assist the towage of the boom	CPA
0915	CY-Oceanography Centre provides data on surface currents and for currents at 30 meters depth	OC-CY
0915	Larnaca MRCC informs Police Air Operations Unit for take off	MRCC
0930	Departure of Media representatives and observers from Limassol Old Port	DMS
0950	BEGIN OF OPERATIONAL PHASE	
1000	Helicopter departure from Larnaca	Air Police
1000	Analysing on oil probe and determining Flashpoint, viscosity, density and ppm	Petronav
1015	Arrival of observers	Sail Away
1020	Helicopter arrival on scene and communication exercise	All
1025-1130	Exercise and participants in full operation	All
1130	END OF OPERATIONAL PHASE	
1200	Debriefing	OSC/All
1200	Recovery of equipment from the sea	Petronav
1215	Enquiry to Department of Environment to specify facilities where to discharge oily waste	DMS
1300	Communication with IOPC Fund and activation of damage compensation	DMS
1400	END OF EXERCISE	DMS

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SHORTCOMINGS AND AREAS OF IMPROVEMENT

- Although it was the first time that we had in Cyprus an exercise with the participation of an EMSA oil recovery ship, it has to be said that the cooperation between the ship, the OSC and other participants was smooth. The “ALEXANDRIA” crew is well trained and familiar with the tasks and duties of oil recovery services.
- On the other hand, we have seen that the national response capacity is insufficient. Without the assistance of EMSA or other third parties, it will not be possible to deal with a major oil spill. The lack on suitable government vessels and the limited trained personnel make it difficult if not impossible, to deploy at sea the national oil response equipment.
- To make use of EMSA’s “ALEXANDRIA” full capabilities in a real emergency, the contractor (Cyprus), needs to be able to provide at least 2 suitable tug or service boats. As it is not always certain that the Cyprus Ports Authority will have the capacity to provide its port tug boats, it is suggested that this issue remains open for further discussion.
- “Cyprus National Oil Spill Response Plan” needs to be updated and revised in order to include the possibility and procedure for the mobilisation of EMSA oil recovery services. Also, it needs to include the procedure for claims management, requesting compensation through the IOPC Fund and though the ship’s insurance and P&I Club.

PROPOSALS FOR THE FUTURE

The Department of Merchant Shipping believes that the following proposals should be taken into consideration for future exercises:

- The national oil pollution response exercise with the participation of EMSA should be planned and performed on an annual basis. This is required to ascertain a high degree of readiness and ability to respond to a major oil spill incident;
- The scenario could be expanded to include additional spills in other locations, which will warrant the mobilisation of more than one EMSA oil recovery ship;
- It is of paramount importance to enhance the national response capacity the soonest possible;
- To test the national capabilities, it is needed to deploy the national capacity and response equipment in full scale;

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- A future exercise of this kind needs to train also the discharge of oily residues in a designated oil discharge facility.

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“NIRIIS 2011” IN PICTURES 6th October 2011



07:00 am – Arrival of OSC on board



07:15 am – Briefing and coordination meeting

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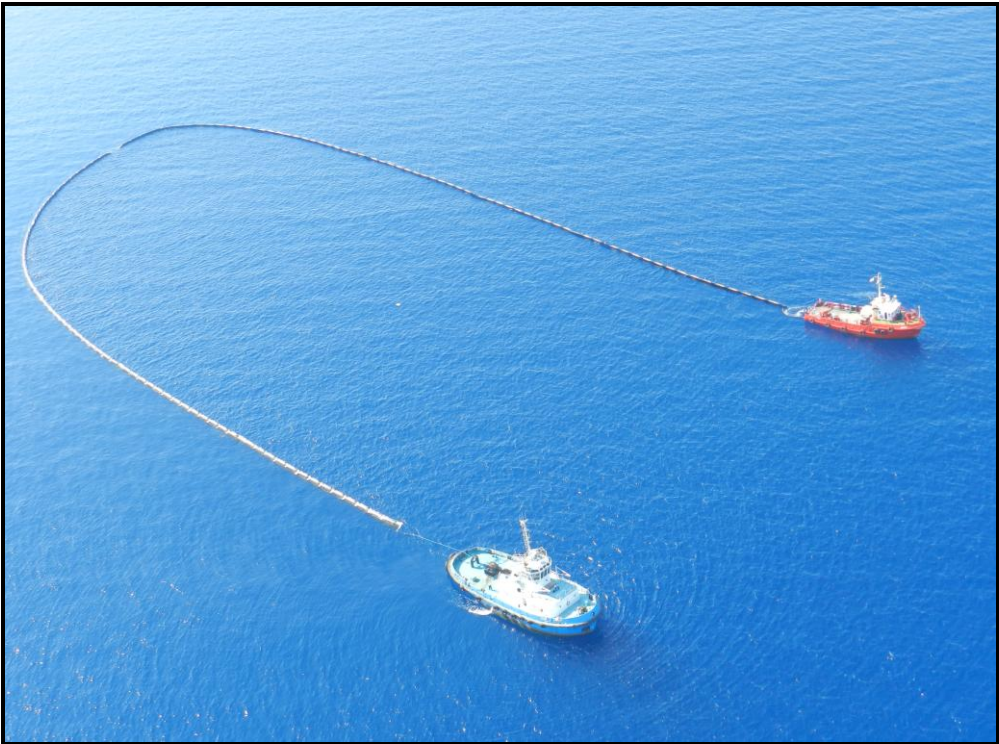


“LAMBOUSA II” engaged in boom handling



Boom deployment

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Formation of the boom in “U” form with open end



Oil Recovery Vessel “ALEXANDRIA” with deployed rigid sweeping arms

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Tug boats “PRINIAS” and “LAMBOUSA II”



Panoramic view of the exercise

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“ALEXANDRIA” with deployed sweeping arms



Rigid sweeping arm and clean water discharge

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Observers and media



“AMFITRITI”(DFMR) training dispersant spray

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Exercise overview from “ALEXANDRIA”

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APPENDICES

- I GENERAL PROGRAMME**
- II PREPARDNESS EXERCISE AT E.A.C. VASSILIKOS, 3rd October 2011**
- III BEACH CLEANING EXERCISE, ST. RAPHAEL BEACH, 5th October 2011**

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APPENDIX I

GENERAL PROGRAMME

GENERAL

The Republic of Cyprus and the European Maritime Safety Agency (EMSA) are organizing “NIRIIS 2011”, a joint oil spill response exercise at sea between 4th and 6th October 2011. The exercise task is to examine the national capability of the Republic of Cyprus to mobilize its antipollution resources and to respond to a major oil spill and also to test the communication and emergency response mechanism.

EXERCISE NAME

The exercise will be given the name code “**NIRIIS 2011**”

EXERCISE TYPE/COORDINATION

- (III) A **Notification Exercise** to be conducted through telephone and other communication means aiming to test the procedures to alert and call out the response teams and the European Union Civil Protection Mechanism (MIC), the operators of shore installations (ports and marinas, naval bases, power stations, oil companies, water desalination plants, industrial installations), in accordance with the national oil spill combating plan. *The Coordinator(s)* will be a team of two Officers from the Department of Merchant Shipping and the Department of Fisheries and Marine Research.
- (IV) An **Equipment Deployment Exercise** to simulate the collection and combating of oil spills at sea with the use of ships, smaller craft, booms, skimmers and dispersant spraying. *The coordination and at sea command* will be assigned to an officer of the Department of Merchant Shipping.

ORGANIZING CYPRUS AUTHORITY

Ministry of Communication and Works
Department of Merchant Shipping
Tel. +357 25 848 100/Fax:+357 25 848 200
maritimeadmin@dms.mcw.gov.cy

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EXERCISE TIMETABLE

Date	Local Time (UTC+3)	
Tuesday, 4 th October	08:00-12:00	Notification Exercise
Wednesday, 5 th October	09:00-13:00 13:30-14:30	Open Day, visits to ORS “ALEXANDRIA” at Limassol port Press Conference
Thursday, 6 th October	06:30 -08:00 10:30 - 12:30 12:30 15:00-16:00	Departure of participating vessel(s) from the port of Limassol to the exercise area” operational phase End of the exercise Debriefing and press release

EXERCISE SCENARIO

In the morning of Tuesday 4th of October 2011, at 05.30 local Cyprus time (UTC/GMT+3), the tanker “MED EXERCISE CARRIER” suffered serious structural damage while being en route from the Suez Canal to the island of Cyprus at the position **LAT: 34°13N and LON: 33°14E**. The tanker was bound to call the oil unloading facility of Vassilikos Power Plant in Cyprus, carrying a cargo of 20.000 Tons of Heavy Fuel Oil 380. The tanker suffered serious cracking on its hull in way of tank no. 6 that contained approximately 1.800 Tons of oil. The release of Heavy FO began immediately. The master informed Cyprus Radio at channel 16 of the damage that created listing of the ship and a continuous oil flow into the sea. The position of the accident is approximately 22 nautical miles from the port and city of Limassol.

WEATHER CONDITIONS

Generally, the weather is brisk with moderate sea winds from the West. At sea, immediately after the accident, the weather conditions were fresh breeze of 10 m/s from the west with moderate seas.

TIME ZONE

Cyprus local (summer) time UTC+3

EXERCISE LOCATION

3 nautical miles from the south coast of Limassol at geographical central position:

Lat: 34° 38' N

Lon: 33° 06' E

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The area is within Limassol port limits and will cover an area of appr. 2 square kilometres.

NOTICE TO MARINERS/SAFETY OF NAVIGATION

A navigational notice to mariners and to vessel traffic in the nearby area will be released by the Cyprus Ports Authority. The Department of Fisheries and Marine Research (DFMR) will issue a navigation notice to all registered fishing craft. The Cyprus Port and Marine Police will monitor the area and prohibit high speed small craft from approaching the exercise area.

PARTICIPATING SHIPS AND BOATS

PARTICIPANT	SHIP'S NAME
EMSA	M/T ALEXANDRIA
Cyprus – PERTRONAV	Tug boat “LAMBOUSA”
Cyprus – Department of Fisheries and Marine Research	1. Multi Purpose vessel “AMFITRITI” 2. Inflatable high speed boat “F.13”
Cyprus Ports Authority	t/b “ASPELIA” or sister tug

OIL SPILL PREDICTION MODEL

The Oceanography Centre of the University of Cyprus will provide oil slick prediction with its MEDSLICK computer programme.

EXERCISE PLAN (NOTIFICATION EXERCISE) 4th October

0800-0830 Larnaca MRCC will inform (1) the Department of Merchant Shipping on the accident and oil discharge at sea and (2) the “Department of Fisheries and Marine Research”.

0830-1000 DFMR activates national oil pollution response plan. All operators of coastal installations receive notification of the accident and on the necessity to take precautionary measures. DMS requests aerial surveillance of incident area via Larnaca MRCC (0915).

1000-1030 Assessment and coordination activities (DMS/DFMR at Limassol VTMISS)

1030-1130 The European Union Civil Protection Mechanism is activated and requested for assistance (Department of Civil Defence and DMS)

1200 End of the notification exercise

“NIRIIS 2011” - CYPRUS OIL POLLUTION RESPONSE EXERCISE

EXERCISE PLAN (OPERATIONAL AT SEA EXERCISE) 6th October

At 0630, M/T “ALEXANDRIA” and T/B “LAMBUSA” will depart to the exercise area. Upon arrival, oil containment booms are to be deployed at sea.

At 0800, Cyprus Port and Marine Police patrol boat to depart with the task to patrol and ensure the safety of navigation in the area.

At 08:00, departure of CPA’s T/B “ASPELIA”. Upon arrival, to assist T/B “LAMBUSA” with the handling and formation of the boom.

Between 10:00-12:00, Oil recovery operations – to begin with the booms deployed in an open “U” shape and the “ALEXANDRIA to be sailing behind the boom. Oil collection will be done with vessel’s rigid sweeping arms and integrated skimmers. Two smaller vessels from the Department of Fisheries and Marine Research will depart from their station in order to assist with dispersant spraying.

At 0900 The Cyprus Electricity Authority (EAC) will be required to deploy oil containment booms outside the Vassilikos power plant to ensure that the water intakes are protected from oil (to be performed on 3rd October for practical reasons).

At 1000, a team of workers from Limassol’s District Administration and Pyrgos community will exercise beach cleaning at St. Raphael Bay (to be performed on 5th October for practical reasons).

NAVIGATION CHART(S)

British Admiralty Charts BA 2074, BA 849, BA 850.

RADIOCOMMUNICATION FREQUENCY (Sea, Shore, Air)

Initially at VHF channel 16, later at VHF 67 (alternative frequency VHF 68) - VTMIS.

AERIAL OBSERVATION

At 1000, upon instructions of Larnaca MRCC, a Cyprus Police helicopter takes off and heads to the exercise area. The helicopter will fly over the area to report the movement of the slick, to test the communication channels and to take air pictures from the exercise.

MEDIA

“NIRIIS 2011” - CYPRUS OIL POLLUTION RESPONSE EXERCISE

Media are invited to cover the course of the exercise at sea **on the 6th October 2011.** Special arrangements to be announced with a press release on 28 09 2011.

OPEN SHIP/OPEN DAY

The EMSA oil recovery ship “ALEXANDRIA” will be open to the public and press during the morning of 5th October 2011 from 09:00-13:00. An organized presentation of the ship will begin at 10:00.

PRESS CONFERENCE

On the 05/10/2011 from 13:30-14:30 at the Evagoras Lanitis Conference Centre. The conference will consist of a short presentation of the exercise, of EMSA’s oil recovery services as well as questions and answers. **Media are invited to attend.**

GUESTS/OBSERVERS

Invited guests and the media will be transferred to and from the exercise area with the chartered catamaran boat **“SAIL AWAY” to depart at 0930 from Old Limassol Port.** Bottled water and refreshments will be offered on board.

EXERCISE EVALUATION, DEBRIEFING AND PRESS RELEASE

On the 6th October 2011 at 15:00, representatives from EMSA and the Department of Merchant Shipping will debrief and evaluate the exercise. A press statement will be prepared and released.

“NIRIIS 2011” - CYPRUS OIL POLLUTION RESPONSE EXERCISE

APPENDIX II

NIRIIS 2011 - OIL POLLUTION RESPONSE EXERCISE - EAC VASSILIKOS, 3rd October 2011

The Vassilikos Power plant area was also a part of NIRIIS 2011 - oil pollution response exercise. It was led by the Department of Merchant Shipping and the Electricity Authority of Cyprus. This was done in compliance with EMSA requirements, in the coastal waters of Vasiliko.

The EAC personnel had demonstrated their ability to deploy and operate the equipment in order to protect the power plant facility and the cooling water intakes. The open-sea booms were inflated and laid in the water. Then, tug boat towed the boom in J-shaped configuration, preventing the oil spill to enter into the port of Electricity Power station. In addition an oil-skimmer was lowered onto the curve of the boom to recover the oil. The EAC personnel had thoroughly mastered their tasks.



Picture 1



Picture 2



Picture 3



Picture 4

“NIRIIS 2011” - CYPRUS OIL POLLUTION RESPONSE EXERCISE

APPENDIX III

NIRIIS 2011 - OIL POLLUTION RESPONSE EXERCISE – Beach Cleaning operations at St. Raphael public beach, 5th October 2011

Limassol District Administration is responsible for the clean-up of shorelines in Limassol District. An oil response team, consisting of manpower from the nearby communities, conducted an oil spill response exercise within the framework of “NIRIIS 2011” - oil pollution response exercise, on 5th October 2011. The group responded speedily and effectively with all the appropriate equipment and wore appropriate personal protective equipment.



Beach cleaning Machinery and Equipment



**Oil spill respond beach cleaning team
Under the supervision of Limassol’s District Administration**

“NIRIIS 2011” - CYPRUS OIL POLLUTION RESPONSE EXERCISE

Areas for Improvement

The exercise highlighted some areas for improvement and identified a number of learning points which can be directly applied in the future. The response group needs to obtain more experience and knowledge through further and regular training programs, in order to become more effective and prepared for real incidents and in the use of all equipment for the cleaning-up of the beaches and disposal of pollutants.

For large scale oil pollution incidents it is further necessary to upgrade the number of personnel and the beach cleaning mechanical and hand held equipment. It will be necessary to provide among others, mobile power packs, hot water cleaning machines, storage tanks and waste skip containers for the easier collection and removal of oily waste. It is also necessary to establish and designate provisional and final waste disposal places.