



MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE

The Italian Marine Pollution Emergency Response Capability and Case Studies



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**General Director - Directorate for Nature and Sea Protection
Italian Ministry for the Environment, Land and Sea**

*2° Standing Committee on Economic, Social and Environmental Cooperation
Oil rig explosion in the Gulf of Mexico: is the Mediterranean ready?*

*Italian Department of Civil Protection
Rome, 18 May 2011*



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Law n. 979/1982

Provisions for the protection of the sea



- Provides for the establishment of a national service for the protection of the marine environment, coastal surveillance and for the prevention and control of marine pollution
- Provides for an emergency response system for the protection of the marine environment and coastal areas in case of accidents



OIL POLLUTION RESPONSE

❑ OBJECTIVES

- ✓ Rapid interventions in order to limit damage
- ✓ Removal of the source of pollution
- ✓ Mechanical removal of the spill



❑ POLLUTION RATING

- **I LEVEL** or **MEDIUM SEVERITY**: pollution which affects only the sea nevertheless it can evolve rapidly in the following phases
- **II LEVEL** or **SEVERE**: pollution which poses a serious threat to the coast
- **III LEVEL** or **VERY SEVERE**: pollution which affects both the sea and coastal areas

LEVELS OF EMERGENCY

According to the Italian Law, there are two levels of emergency which can be declared depending upon the severity of the situation



LOCAL EMERGENCY

comma 2 dell'art.11 Law
31/12/82 n. 979

NATIONAL EMERGENCY

comma 4 dell'art.11 Law
31.12.1982 n. 979

Whenever marine pollution poses a serious threat to the environment and the economy of the area the local Harbour Master on the basis of the **LOCAL EMERGENCY PLAN** declares



LOCAL EMERGENCY

The Ministry for the Environment, Land and Sea – **Protection of Nature and Sea Directorate** –activates an overall coordination of the response

The Ministry for the Environment, Land and Sea informs **the National Service of Civil Protection (PROCIVILMARE)** that local emergency **has been declared.**



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In case the local Harbour Master is unable to control and combat pollution with the resources available at local level



**The Plan of the Ministry for the Environment, Land and Sea is activated.
“Emergency response plan for the protection of the marine environment
and of the coastal areas from accidental pollution by oil or other HNS”**

**The Ministry for the Environment, Land and Sea is in charge of the overall coordination of the response.
The direction of operations is still under the responsibility of the local Harbour Master**

In case local emergency cannot be faced with the means rendered available by the Ministry for the Environment and the Ministry of Infrastructures and Transports



The Ministry for the Environment, Land and Sea requires the declaration of

NATIONAL EMERGENCY



The Head of the Civil Protection Department assumes the direction of all the operations according to the NATIONAL EMERGENCY PLAN



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RESPONSE ON LAND

**The protection of the coast is entrusted to the
Regions and local Authorities**

OPRC 90 CONVENTION

Ratified by Italian Law 464/98

Contracting Parties are required to ensure:

- a minimum level of pre-positioned oil spill combating equipment
- Mechanisms and arrangements to coordinate the response to an oil pollution incident
- A programme of exercises for oil pollution response organizations
- A training programme for relevant personnel
- Capabilities to mobilise resources

Antipollution vessels must have on board oil pollution emergency plans and provide the competent authorities with the relevant pollution reports

Italian Ministry for the Environment, Land and Sea

The Protection of Nature and Sea Directorate has established the Operational Centre responsible for the overall coordination of the response in cases of pollution or high risk of pollution in cooperation with the Coast Guard Headquarters



Antipollution vessels are provided by CASTALIA ECOLMAR on stand-by basis ready to intervene 24/7

- **10 ocean going vessels**
- **30 coastal vessels**

✓ **optimal geographical distribution of the fleet**

✓ **increased coverage of sensitive areas and/or areas at high risk of pollution**

RESPONSE TIME

✓ **within 12 hours from the first alert message sent by the Ministry for the Environment**

✓ **in case pollution occurs within 3 nm from the coast, the first vessel shall intervene within 5 hours from the first alert message sent by the Ministry for the Environment**





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7 ocean Radar v

➤ **Possibi
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Ocean-going vessel "SANTANGELO"

LOA 35,60 m

Unrestricted navigation

Classification: Tug - Recoil

Bollard Pull 60 t

Rapid Deployment Offshore Booms: 400 m

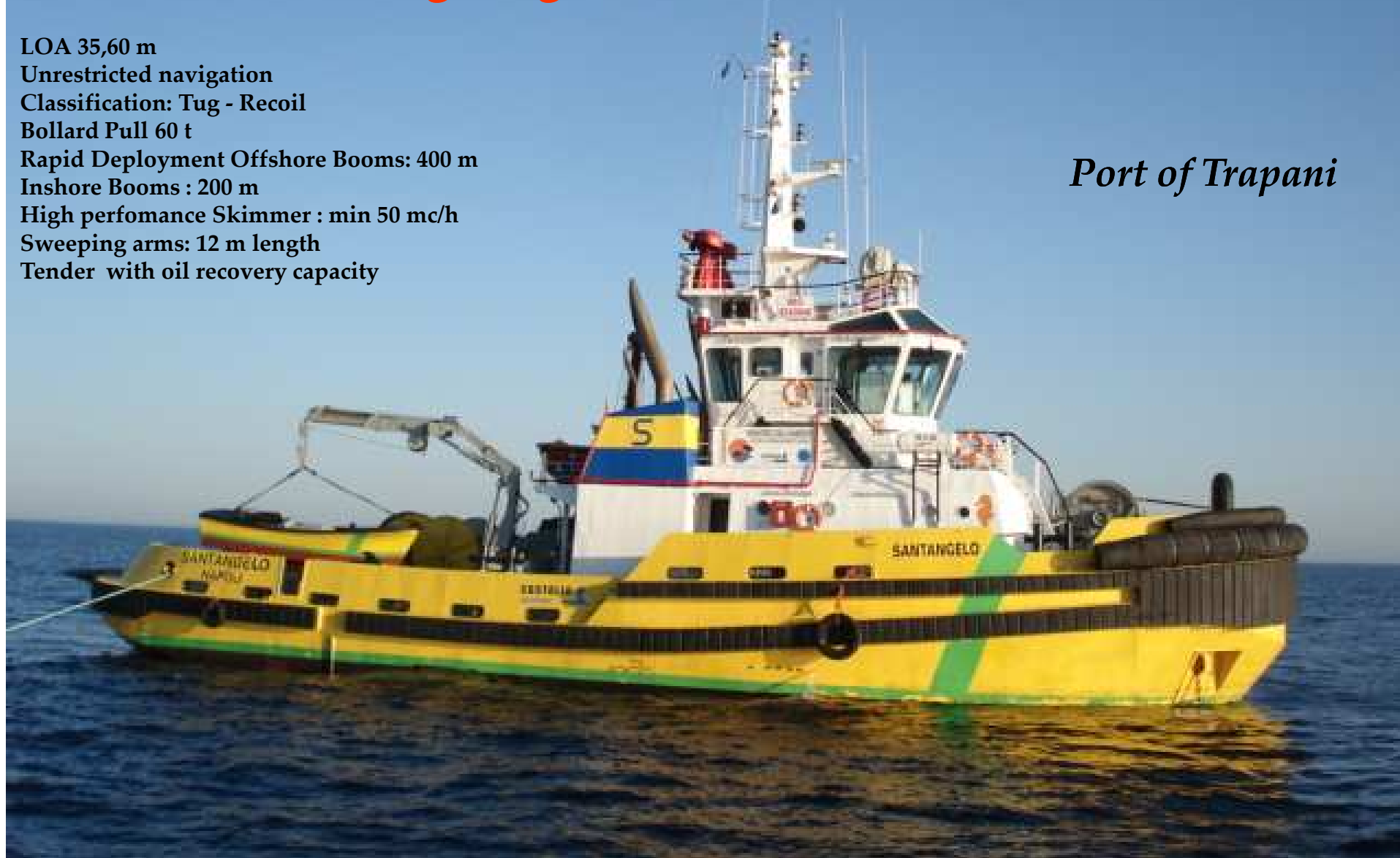
Inshore Booms : 200 m

High performance Skimmer : min 50 mc/h

Sweeping arms: 12 m length

Tender with oil recovery capacity

Port of Trapani





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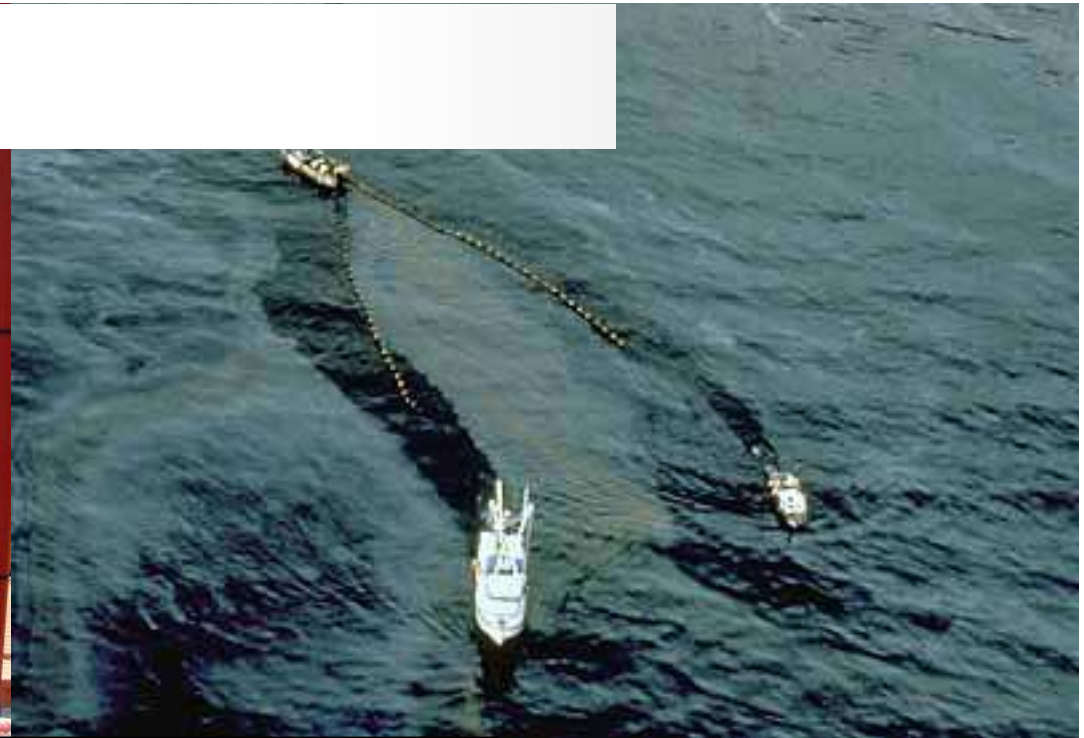
Coastal vessel "TAGIS"

Port of Savona

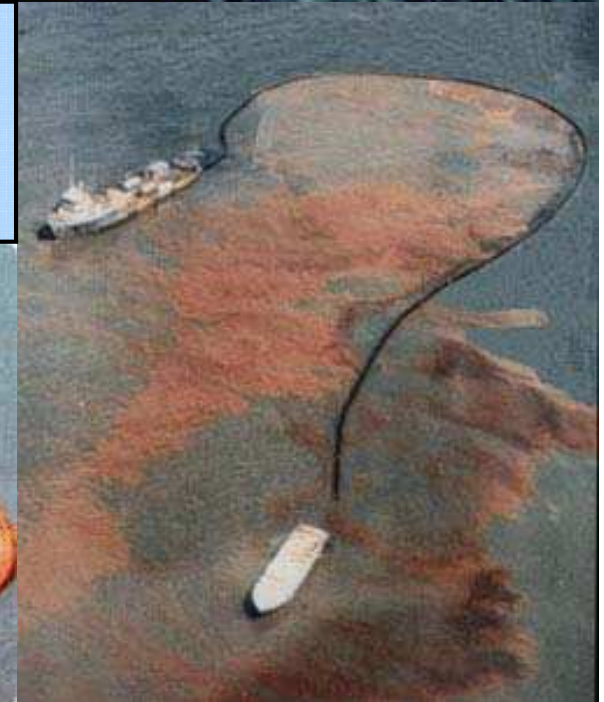
LOA 23 m
Coastal navigation
Classification : Recoil
Rapid deployment inshore Booms: 200 m
High performance Skimmer : min 30 mc/h
Sweeping arms: 6 m length
Tender with oil recovery capacity



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Floating barriers





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SKIMMER





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Standard procedures for oil spill containment

1. Lowering a small boat or tender at sea





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Standard procedures for oil spill containment

2. Inflation of floating barriers





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Standard procedures for oil spill containment

3. Deployment at sea of floating barriers





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Standard procedures for oil spill containment

4. Containment operations





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The use of dispersants in Italian territorial waters is not allowed unless a specific authorization is issued by the Ministry for the Environment

Chemical products must be approved by the Ministry for the Environment

While response operations are carried out, the Ministry for the Environment constantly liaises with the coordinating centre of Castalia Ecolmar which:

- ✓ **Coordinates the activities of antipollution vessels**
- ✓ **Manages the information system**
- ✓ **Coordinates the activities of the other facilities on land**



15 local offices

8 warehouses with further antipollution equipment in perfect working order



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Local offices

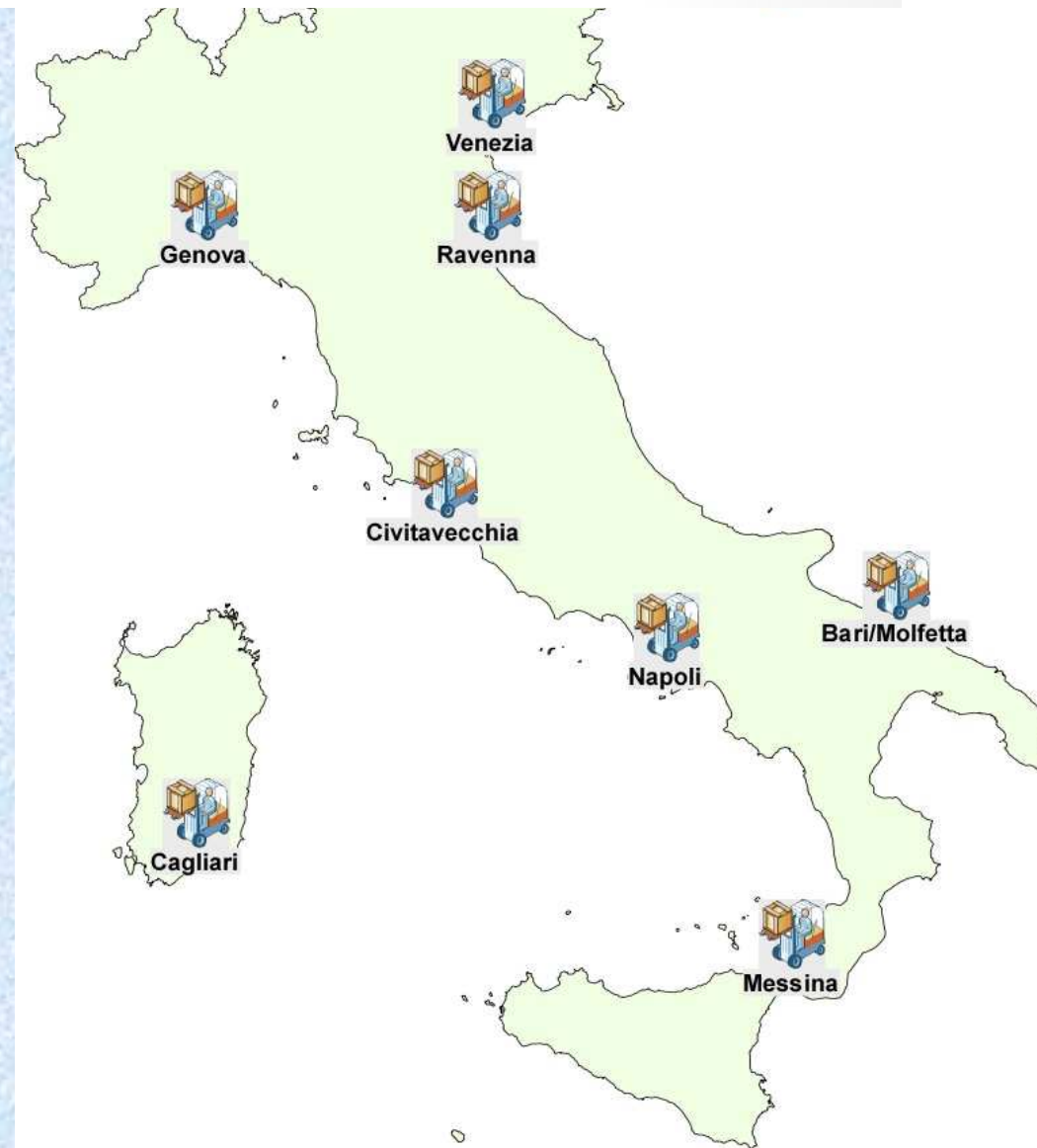




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Warehouses





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INFORMATION SYSTEM

CASTALIA WebGIS Fleet Tracking System

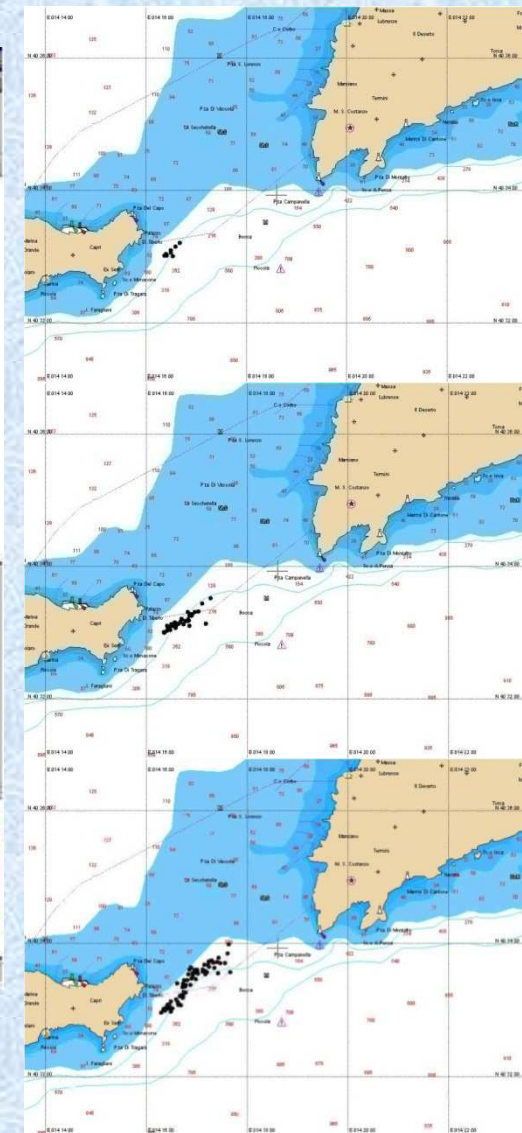
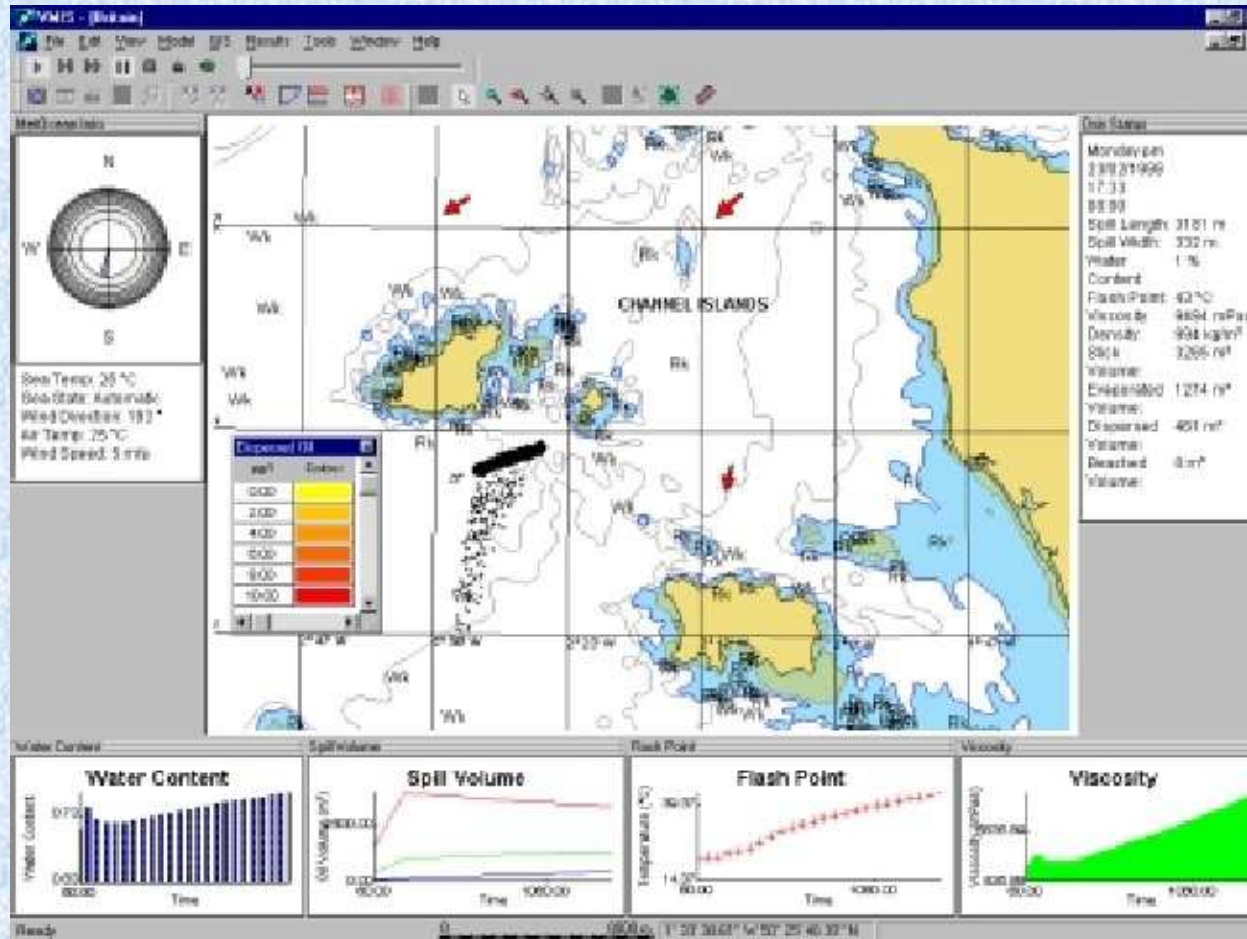
Internet | Modalità protetta: attivata | 100%

Real time Web GIS fleet tracking system

LAT: 43.1544340996069°
LON: 12.3835777442172°



Oil spill forecasting model



TASK FORCE

In cases of emergency, a task force of experts is able to promptly intervene on site in order to support the response team by providing technical advice on the following issues:

- ✓ **Naval operations in emergency situations**
- ✓ **Shipbuilding**
- ✓ **Equipment for marine pollution response**
- ✓ **Environmental damage assessment**

The task force is available h24





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CASE STUDIES



SARDINIA January 2011

**Spillage of oil at the terminal of the E-ON
power plant in Porto Torres
LOCAL EMERGENCY**

**Antipollution vessels: TIRRENO (ocean-
going vessel) and DOLPHIN I (coastal vessel)**

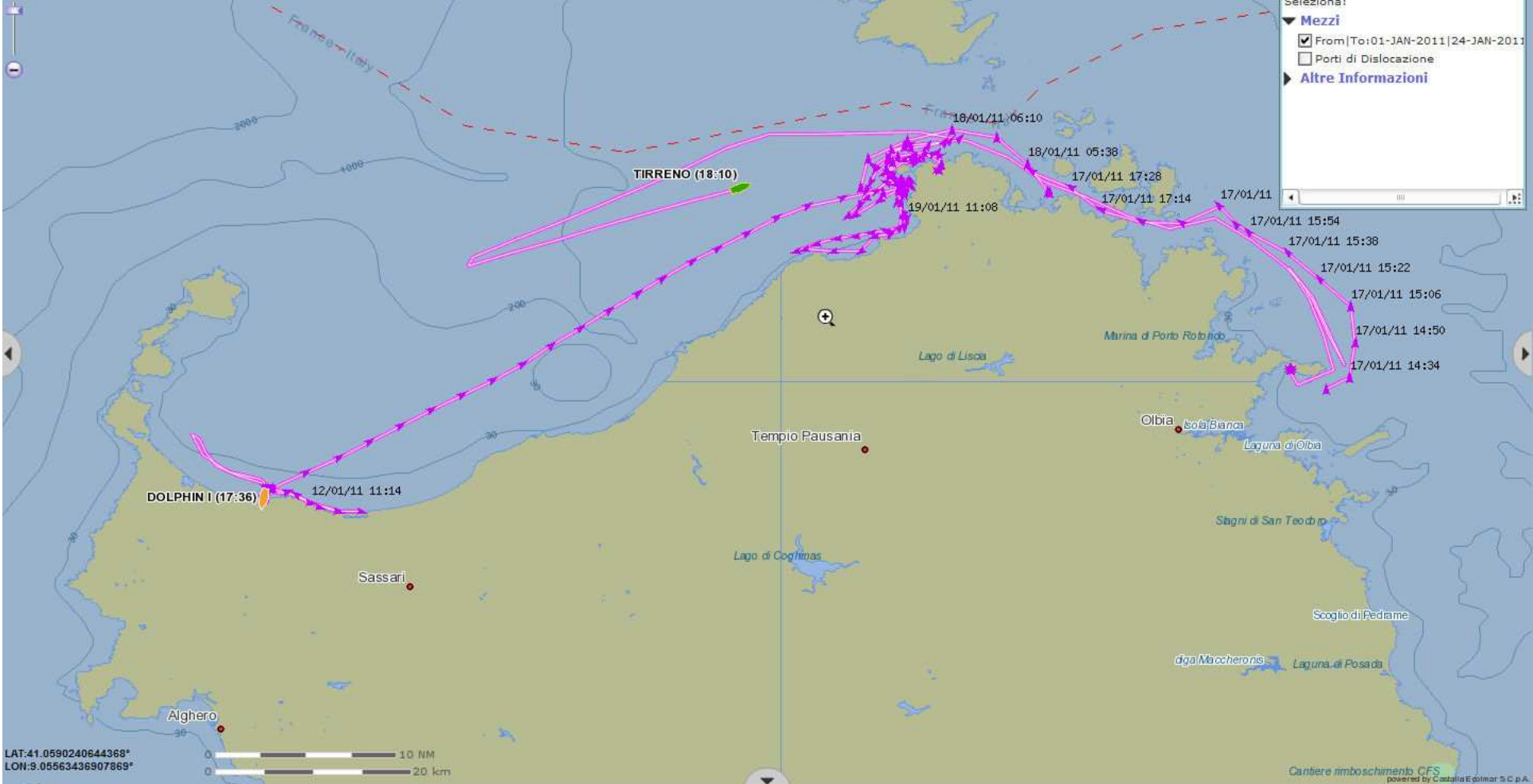




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CASTALIA WebGis
Fleet Tracking System

search...



Legenda

Seleziona:

- Mezzi
- From|To:01-JAN-2011|24-JAN-2011
- Porti di Dislocazione

Altre Informazioni

LAT:41.0590240644368°
 LON:9.05663436907869°

0 10 NM
 0 20 km



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Oil and waste recovered:

4,5 m³ of oily mixtures

15 mt saturated absorbent booms

40 kg saturated rags

1 m³ tar

40 kg contaminated wood





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6 March 2008

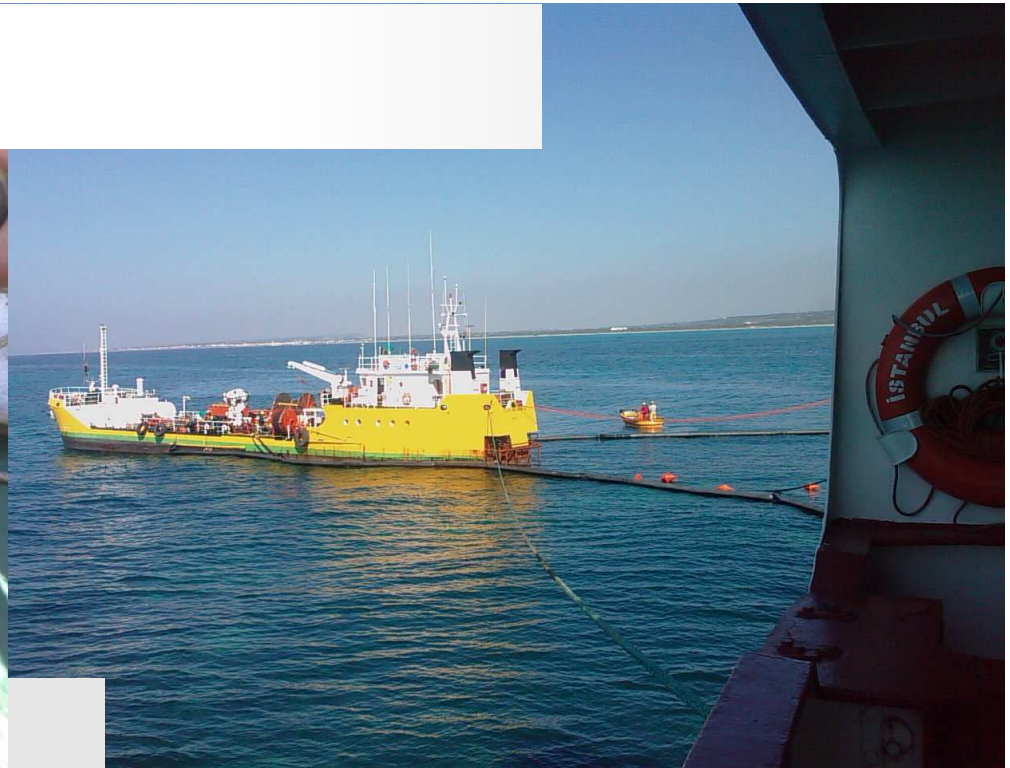
MV MARTI PRIDE runs aground in the shallows of Ugento, 1,3 nm from the coast
LOCAL EMERGENCY

Gross tonnage: 2.700 t
length: 90 m





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Bunker removal

Material recovered:
96,5 m³ water/oil emulsion





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**in the
Mediterranean....**

LEBANON

October 2006

Jieh power plant (Beirut – Lebanon)

200 m
500 ft

Power plant

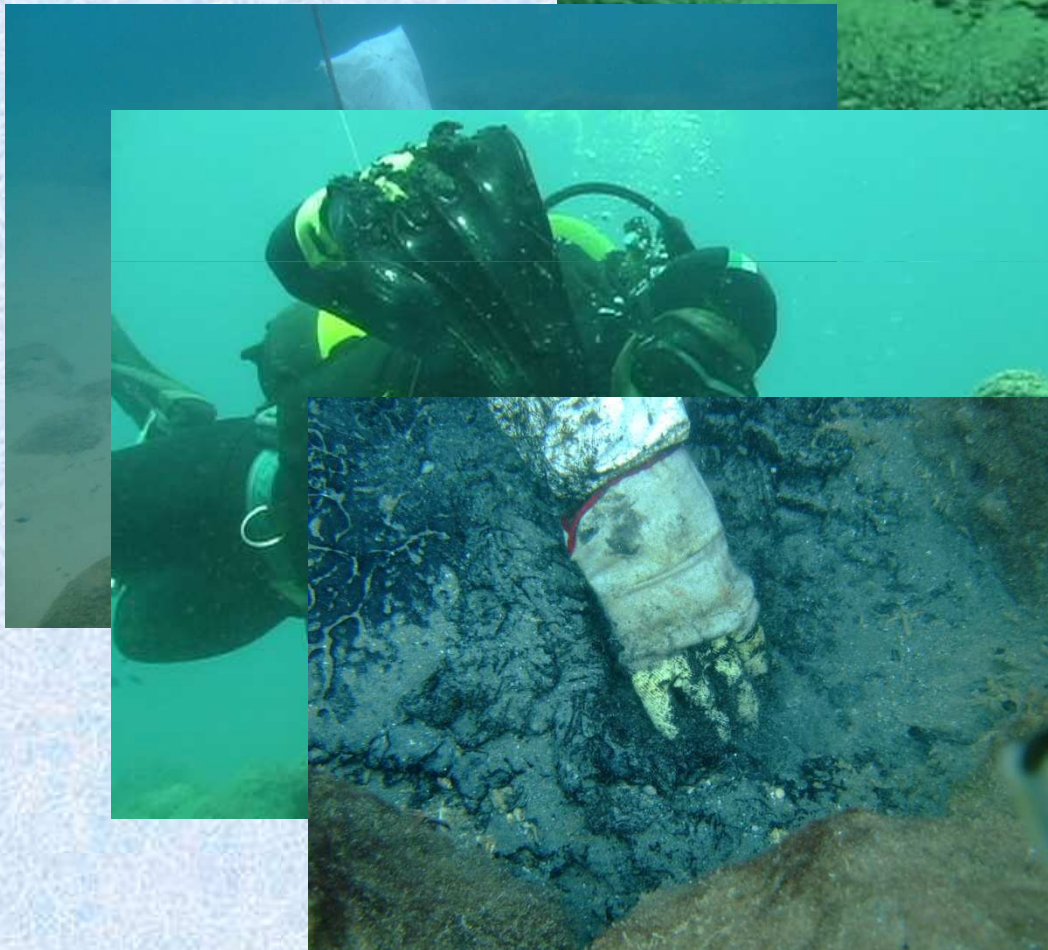


**Fuel stores at the power
plant were bombed during
the war, leading to the
spillage of oil into the sea**



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Contamination of the seafloor in front of the power plant





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The Italian assistance



S/V Tito



Pontoon



Patrol vessel

Aircraft

Aircraft carrier



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**Manual removal and
collection of the material
in *big bags***

**Removal of the product
through suction pumps**



Oil recovered:

42 m³ of tar products



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EXERCISES

Exercises are carried out on a regular basis in order to train and update crews

At international level, in the framework of RAMOGE (sub regional plan between France, Monaco and Italy), specific exercises with simulations of accidents are carried out once a year





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THANK YOU FOR YOUR ATTENTION

