

**REGIONAL MARINE POLLUTION EMERGENCY  
RESPONSE CENTRE FOR THE  
MEDITERRANEAN SEA  
(REMPEC)**



IMO-OMI



UNEP-PNUE



**EUROPEAN WORKSHOP ON SATELLITE IMAGERY AND  
ILLICIT OIL SPILLS IN EUROPE AND IN THE  
MEDITERRANEAN AND FIELD ACTIVITIES IN  
ROGNAC, MARSEILLE**

**MEDIPOL 2003**

**Toulon, France  
1 – 4 October 2003**

**REPORT**



**OCTOBER 2003**

# **EUROPEAN WORKSHOP ON SATELLITE IMAGERY AND ILLICIT OIL SPILLS IN EUROPE AND IN THE MEDITERRANEAN, TOULON, FRANCE, 1-4 OCTOBER 2003 AND FIELD ACTIVITIES IN ROGNAC/MARSEILLE**

## **MEDIPOLE 2003**

### **REPORT**

#### **INTRODUCTION**

1. Between Thursday 2 October and Saturday 4 October 2003 the "Centre de documentation de Recherche et d'Experimentation sur les Pollutions Accidentelles des Eaux" (CEDRE) organised with the financial support of the European Commission the **European Workshop on Satellite Imagery and Illicit Oil Spills in Europe and in the Mediterranean**, in Toulon, France. The Workshop was preceded by field visits to the stockpiles of FOST and to the POLMAR French surveillance aircraft on **1 October 2003**, organised by the Regional Marine Emergency Response Centre for the Mediterranean Sea (REMPEC), in collaboration with CEDRE for REMPEC's Operational Focal Points representatives attending the Workshop.

2. In conformity with its programme of activities for the year 2003 and taking into consideration the recommendations of the Meetings of REMPEC Focal Points that regional training activities should focus on specific, advanced topics and bearing in mind the recommendations of the Contracting Parties to the Barcelona Convention related to monitoring of illicit discharges and aerial surveillance, REMPEC decided that it would be a good opportunity to merge MEDIPOLE 2003 with the captioned European Workshop.

3. The Workshop-MEDIPOLE 2003 was prepared considering the particularity to adapt it to operational staff from authorities in charge of pollution control who have been designated to play a role related to surveillance and monitoring activities (detection of illicit oil discharges at sea), gathering of evidence and prosecution of offenders. The participation of the Mediterranean coastal States in the Workshop was intended to serve as a catalyst for future actions, to be taken or envisaged by Mediterranean countries against illicit marine pollution.

4. The objectives of MEDIPOLE 2003 were to provide the participants with an opportunity to share their operational experience in the field of oil spill detection, to compare best practices when dealing with marine pollution offenders, to present new tools such as satellite remote sensing and to contribute also to the objectives of MAP (Mediterranean Action Plan) in reinforcing co-operation among coastal States and protecting natural marine resources.

#### **ORGANIZATION**

5. The organization, the preparation and the delivery of the European Workshop was the responsibility of CEDRE, while the organization of the field visits was entirely the responsibility of REMPEC. In fact, REMPEC decided to add one day to the programme prior to the commencement of the Workshop with a view to giving at the same time the opportunity to the participants to acquaint themselves with the services offered by the oil industry in relation to marine pollution accidents, and with the surveillance aircraft used for aerial reconnaissance of oil spills by the French authorities, as follows:

- a) Wednesday 1<sup>st</sup> October 2003(morning)
  - guided visit of Fast Oil Spill Team (FOST) operated in Rognac by TotalFinaElf;
- b) Wednesday 1<sup>st</sup> October 2003(afternoon)
  - guided presentation of the Polmar surveillance aircraft of the French customs, at Marseille/Marignane airport.

6. The role of REMPEC included:

- preparation of the field visits to FOST and to POLMAR French surveillance aircraft;
- invitation of participants (REMPEC's Focal Points representatives);
- making necessary travel and accommodation arrangements of trainees;
- provision of necessary local transport arrangements, for the trainees (airport/hotel/airport) and (hotel/Workshop venue/hotel);
- covering the costs of travel and daily subsistence allowance for trainees;
- payment of a fee per trainee to CEDRE in order for the latter to provide the following services;
  - all written materials for the participants;
  - venue of the Seminar (conference room);
  - audio visual equipment (overhead, slide, Power Point and video projectors);
  - interpretation from/to English and French;
  - lunches for all the trainees;
  - coffee breaks;

7. The role of CEDRE included:

- preparation of the programme of the Workshop;
- identification, selection and invitation of external lectures, facilitators and Chairs of the two round tables;
- providing a liaison with REMPEC and secretarial services during the Workshop

8. Cdr. Elias Sampatakakis, REMPEC's Programme Officer (HNS), was in charge of ensuring the smooth running of MEDIPOL 2003.

9. Like in all regional training activities organized by REMPEC, the official languages of MEDIPOL 2003 were English and French and all lectures were simultaneously interpreted into these two languages.

10. MEDIPOL 2003 was held in a Conference Room at the Hotel Mercure, place Besagne, Toulon, France.

11. All participants in the European Workshop sponsored by REMPEC were accommodated at the Hotel LaTour Blanche in Toulon.

12. The working hours of the Seminar were from 09.00 to 17.30/18:00 with a lunch between 12.30 and 14.00 and two coffee breaks (morning/afternoon).

13. The Workshop was inaugurated on Wednesday 2 October 2003. During the Opening session the participants were welcomed by the French Maritime Prefect of the Mediterranean Region Admiral Jean-Louis FILLON, the Representative from the EC, Mr. Gilles Vincent and by R. Admiral R. Patrino, Director of REMPEC. The latter emphasized the ongoing and scheduled activities of REMPEC related to prevention of operational pollution from ships, and presented the legal framework (New Prevention and Emergency Protocol) upon which improved monitoring of unlawful discharges should be sought in the Mediterranean region.

14. A cocktail reception was held on Friday 3 October 2003. R. Admiral R. Patrino, being the Chair of the Workshop on Saturday 4 October 2003 thanked the lecturers who contributed to the Workshop as well as all the participants for their active participation in MEDIPOL 2003. He also delivered Certificates of attendance (c.f. **ANNEX VI**) to the participants sponsored by REMPEC and closed the work of the Workshop.

## **PARTICIPANTS**

15. Thirty seven participants from twenty Mediterranean coastal States attended MEDIPOL 2003, while participants from European countries, EU members, sponsored by the EC were from: Belgium, Finland, France, Italy, Germany, Ireland, The Netherlands, Portugal, Spain, United Kingdom and Norway (associated member). Observers from regional agreements (Helsinki Commission, Bonn Agreement) and the European Space Agency (ESA) also participated. The complete list of participants sponsored by REMPEC is given in **ANNEX IA**, while the complete list of participants sponsored by the EC is given in **ANNEX IB**.

16. MEDIPOL 2003 was aimed at government officers who were expected to be involved in the prevention of illicit oil discharges in their respective countries, at the national level. Their envisaged role in national preparedness systems should preferably include surveillance and monitoring activities (detection of illicit oil discharges), gathering of evidence and prosecution of offenders. It was expected that the selected participants had a good basic knowledge of problems associated with marine oil pollution.

17. Since concrete operational and legal experiences were to be presented and discussed during various sessions of the Workshop, REMPEC's national Focal Points were advised to select participants who already had a good understanding and the basic knowledge of problems associated with marine oil spill pollution control. Consequently, experts and operational staff selected to participate had to be in a position to exchange their experiences, their needs and their opinions and contribute to the formulation of detailed technical proposals to improve surveillance aspects and prosecution of offenders. Practical proposals, which might be envisaged by the Mediterranean countries, individually or jointly, expected to be presented to representatives of the different national authorities in charge of pollution response in those countries for possible future initiatives at national or regional level.

18. Twenty Mediterranean coastal States nominated their representatives. The European Community informed REMPEC that two EC representatives would attend the Workshop and since the event was financed by the EC, the expenses for their participation would be covered by the EC.

19. REMPEC fully sponsored the participation of all the Mediterranean coastal States representatives in the Workshop. Each Mediterranean Coastal State, non-EU member was invited to nominate two participants from different national authorities playing key role in surveillance and monitoring activities (detection of illicit oil discharges at sea), gathering of evidence and prosecution of offenders. France, Greece, Italy, Spain were invited to nominate only one participant, since 2 (two) fellowships were covered by the EC within the framework of the EC/CEDRE project. Egypt and Lebanon nominated a third participant each, and covered entirely the cost of their participation. Two more participants from Italy attended the Workshop, who covered their own cost of participation.

20. The majority of participants in MEDIPOL 2003 sponsored by REMPEC were civil servants (33 out of 35) from various ministries or governmental departments. Twenty-three (23) came from ministries, departments, agencies or services dealing with environmental affairs, and ten (10) from offices related to maritime affairs.

## **PROGRAMME**

21. The programme of MEDIPOL 2003, given in **ANNEX II** was prepared bearing in mind the objectives of the Workshop, as given in paragraph 4 above, and was therefore divided in three distinct modules.

22. During the field visit to FOST at Rognac, Mr. Francois Le Port (TOTAL) gave an overview of the main activities undertaken within the Mediterranean Sea by the Fast Oil Spill Team (FOST) operating in the framework of TotalFinaElf, followed by a tour on the stockpile of anti-pollution means and equipment used by FOST. During the field visit to POLMAR French surveillance aircraft in Marseille/Marignane airport, the main operational capabilities of a 2<sup>nd</sup> generation POLMAR surveillance aircraft were explained to the participants by pilots of the respective Air Means Unit of the French Customs. During the field visits TOTAL SA kindly provided simultaneous interpretation between French and English.

23. The morning session of the first day of the Workshop was dedicated to the regional legal framework for co-operation in the Mediterranean region (Barcelona Convention-Mediterranean Action Plan), with the lecture delivered by the MAP Co-ordinator, Mr. L. Chabason, as well as in the Baltic Sea area (Helsinki Convention) and the North Sea (Bonn Agreement) with emphasis placed on operational surveillance requirements and capabilities. The afternoon session of the first day was devoted to exchanging operational experiences on the use of stand alone or combined sea surveillance practices, which are aimed at improving surveillance efficiency as well as offenders prosecution.

24. The second day was devoted to key lecturers , who introduced the tasks to be addressed by the two parallel round tables, which were set up in order to discuss further the issues raised and to propose recommendations, as follows:

- Table one: Detection Techniques (DET), chaired by Mr.L.Fusco from The European Space Agency (ESA);
- Table two: Mutual Information and Prosecution Procedure (MIP) chaired by Mr. D. Roy from CEDRE.

The trainees participated in the round tables, taking account of their scientific background, knowledge and experience.

25. The third (final) day of the Workshop was devoted to formulating the proposals and recommendations reached during the discussion of the round tables. R. Admiral R.Patrano, Director of REMPEC, chaired the session. R. Admiral Patrano summarized the main issues discussed during the Workshop, presented some recommendations concerning sustainable combined operational use of surveillance practices, while he identified some priority issues that should be further explored in a national, regional or international context. He also stressed that participation of representatives of European countries, EU members and of the Contracting Parties to the Barcelona Convention in similar initiatives, will definitely prove to be mutually beneficial in terms of exchanging background information and operational experiences in their respective countries. The proposals and recommendations agreed during the Workshop are found in **Annex V**.

## **LECTURERS**

26. Five (5) lecturers presented the programme of the Workshop. Two chairpersons facilitated the discussion that took place: Mr. L. Chabason – Day 1, R. Admiral R.Patrano - Day 3, Day 2 Mr. J. C. Garnier, Secrétaire General de la Mer, France.supported by Mr. F. Parthoit, CEDRE. During the second day, Mr.L.Fusco from ESA chaired Table-one (DET), while Mr. D.Roy from CEDRE chaired Table two (MIP).

The lecturers included: The MAP Co-ordinator, Mr. L. Chabason, one representative from Helsinki Commission, (Mr. T. Fago); one representative from Bonn Agreement, (Mr. S. Huisman); joint presentation given by Mr.T.Tarchi (EC-JRC-ISPRA) / Mr. L. Fusco (ESA-ESRIN), /Mr. E. Cubero-Castan (CNES); Representatives from UK Maritime and Coastguard Agency and CEDRE (Mr. T. Stone/Mr. F. Parthiot respectively).

27. The complete list of lecturers is given in **ANNEX III**.

## **DOCUMENTS**

28. Documents distributed during MEDIPOL 2003 included printouts of five presentations made by the lecturers, during the first day as well as a summary of the operational capabilities of the 2<sup>nd</sup> generation POLMAR surveillance aircraft distributed to the participants during the field visit to the POLMAR aircraft.
29. All the presentations and documents were given to the participants in English or French.
30. The list of documents distributed during MEDIPOL 2003 is given in **ANNEX IV**.

## **CONCLUSIONS OF THE WORKSHOP**

34. MEDIPOL 2003 was aimed at improving and updating the knowledge of government officers who are expected to be involved in the prevention of illicit oil discharges in their respective countries, at the national level. The trainees were also presented with a comparative analysis of the efficiency of surveillance practices of offences at sea, in terms of improved surveillance efficiency as well as enhanced offenders prosecution. Participants also benefited from the concrete operational and legal experiences presented and discussed in the framework of existing regional agreements, mainly as related to the Baltic Sea and North Sea surveillance.
35. It is envisaged that the proposals and recommendations that were eventually agreed to would facilitate and would promote a dialogue on priority issues that should be further explored in a national, regional or international context in terms of operational surveillance used to support prevention of unlawful discharges and response operations in critical emergencies.

## ANNEX 1A

### LIST OF PARTICIPANTS / LISTE DES PARTICIPANTS

#### ALBANIA / ALBANIE

**XHAXHIU Shkelqim**

Director of Maritime Transport Department  
Ministry of Transport and Telecommunication  
SHESHI "SKENDERBEJII"  
S.S. Toptani Street Nr. 4  
TIRANA

**(Mob.) +355 68 20 55 804**

E-mail: [shxhaxhiul@yahoo.com](mailto:shxhaxhiul@yahoo.com)

**Certificate N°: 2227**

**MALOKU Arben**

Specialist of Maritime Transport Department  
Ministry of Transport and Telecommunication  
SHESHI "SKENDERBEJII"  
S.S. Toptani Street Nr. 4  
TIRANA

E-mail: [beni2000al@yahoo.com](mailto:beni2000al@yahoo.com)

**Certificate N°: 2228**

Tel: +355 (4) 22 80 08, 223 073

Fax: +355 (4) 23 46 54

#### ALGERIA / ALGERIE

**LAOUIRA Abdelhafid (Dr)**

Conseiller au Ministère de l'Aménagement du Territoire  
et de l'Environnement  
Rue des Quatre Canons  
ALGER

**(Mob.) +213 (61) 501 886**

E-mail: [alaouira@yahoo.fr](mailto:alaouira@yahoo.fr)

**Certificate N°: 2229**

#### BOSNIA AND HERZEGOVINA / BOSNIE ET HERZEGOVINE

**ALIC Ramiza, B.Sc. Economist**

Hydro – Engineering Institute  
1 Stjepana Tomica Str.  
71 000 SARAJEVO  
E-mail: [ramiza.alic@heis.com.ba](mailto:ramiza.alic@heis.com.ba)

**Certificate N°: 2230**

**VUCIJAK Branko, M.Sc. Mathematician**

Hydro – Engineering Institute  
1 Stjepana Tomica Str.  
71 000 SARAJEVO  
E-mail: [branko.vucijak@heis.com.ba](mailto:branko.vucijak@heis.com.ba)

**Certificate N°: 2231**

#### CROATIA / CROATIE

**ANDRAKA Milivoj**

Harbours Masters Office  
Senjsko pristaniste 53  
Hr – 51000 RIJEKA

Tel: +385 51 212 474

Fax: +385 51 212 696

**(Mob.): +385 91 542 52 00**

E-mail: [milivoj.andraka@pomorstvo.hr](mailto:milivoj.andraka@pomorstvo.hr)

**Certificate N° : 2232**

## CROATIA / CROATIE (cont...)

### **ZAUHAR Zlatko**

“Dezinseksija”  
Brajsina 13  
HR – 51000 RIJEKA

Tel: +385 51 506 920  
Fax: +385 51 512 769  
**(Mob.): +385 98 259 407**  
E-mail: [Dezinsekcija@ri.htnet.hr](mailto:Dezinsekcija@ri.htnet.hr)

**Certificate N°: 2233**

## CYPRUS / CHYPRE

### **AVGOUSTI Antonis**

Fisheries and Marine Research Inspector  
Ministry of Agriculture, Natural Resources and Environment  
Department of Fisheries and Marine Research  
Aeolou Str.  
1416 NICOSIA

Tel: +357 228 078 67  
Fax: +357 227 759 55  
E-mail: [aavgousti@dfmr.moa.gov.cy](mailto:aavgousti@dfmr.moa.gov.cy) / [antonis\\_avgousti@hotmail.com](mailto:antonis_avgousti@hotmail.com)

**Certificate N° : 2234**

### **EFSTRATIOU Ioannis**

Marine Surveyor A  
Department of Merchant Shipping  
Kylinis Street, Mesa Geitonia  
CY 4007 LEMESOS  
PO BOX 56193, CY 3305

Tel: +357 (25) 848 100  
Fax: +357 (25) 848 200  
E-mail: [jefstratiou@dms.mcw.gov.cy](mailto:jefstratiou@dms.mcw.gov.cy)

**Certificate N°: 2235**

## EGYPT / EGYPTE

### **ABD EL KHALEK Ahmed Mostafa (Eng.)**

GIS & RS Unit Manager  
Egyptian Environmental Affairs Agency  
30 Misr Helwan Agriculture Rd.,  
Maadi, CAIRO

Tel: +202 525 6452  
Fax: +202 525 6490  
E-mail: [amosa307@hotmail.com](mailto:amosa307@hotmail.com) / [Amoussa\\_eg@yahoo.com](mailto:Amoussa_eg@yahoo.com)

**Certificate N°: 2236**

### **SHETA Ahmed Kasem (Chemist)**

Egyptian Environmental Affairs Agency  
30 Misr Helwan Agriculture Rd.,  
Maadi, CAIRO

Tel: +202 525 6491 – 92  
Fax: +202 525 6494  
E-mail: [ahmed\\_sheta@hotmail.com](mailto:ahmed_sheta@hotmail.com)

**Certificate N°: 2237**



## **EGYPT / EGYPTTE (cont...)**

**EL KAZAZ Kamal (Eng.)\*\***

**Certificate N° 2238**

Director  
Marine Environment Protection & Port State Control Officer PO Box 1 Porttawfiq  
SUEZ

Tel: +20 62 33 11 23 / 33 11 24

Fax: +20 62 33 05 23 / 33 11 17

**(Mob): +20 10 12 65 992**

E-mail: [redseaut@idsc1.gov.eg](mailto:redseaut@idsc1.gov.eg) / [KamalKazaz@hotmail.com](mailto:KamalKazaz@hotmail.com)

*\*\*Participation not sponsored by REMPEC*

## **FRANCE/FRANCE**

**CASTANIER Jean-Paul**

**Certificate N° : 2239**

Bureau Aeronaval des Douanes  
8 rue Eugène VARLIN  
BP 78410  
44184 NANTES CEDEX 4

Tel : +33 (0) 2 51 84 43 16

Fax : +33 (0) 2 40 69 53 07

**(Mob.) :+33 (0) 6 74 20 32 71**

E-mail : [jean-paul.castanier@douane.finances.gouv.fr](mailto:jean-paul.castanier@douane.finances.gouv.fr)

## **GREECE / GRECE**

**HATZOPOULOS Christos (Lt. Cdr H.C.G.)**

**Certificate N° : 2240**

Hellenic Republic  
Ministry of Mercantile Marine  
Marine Environment Protection Division  
109 Ipsilantou Str.,  
185 32 PIRAEUS

Tel : +302 10 419 1132 – 419 1304

Fax : +302 10 422 0440 – 422 0441(+302 104 010 312)

E-mail : n/a

## **ISRAEL**

**VARBOURG Eii**

**Certificate N° : 2241**

Eilat Marine Pollution Prevention Station  
Marine and Coastal Environment Division  
PO Box 1569  
EILAT

Tel: +972 8 637 6376

Fax: +972 8 637 6375

E-mail: [eliv@sviva.gov.il](mailto:eliv@sviva.gov.il)

**ALKALAY Ronen**

**Certificate N°: 2242**

Head of Marine Pollution Prevention Branch  
Marine and Coastal Environment Division  
PO Box 31007  
HAIFA

Tel: +972 (4) 8633 500

Fax : +972 (4) 8633 520

E-mail : [ronene@sviva.gov.il](mailto:ronene@sviva.gov.il)

## ITALY / ITALIE

### **GIANGRECO Roberto (Dr)**

Italian Ministry for the Environment and Territory  
Sea Protection Department  
Via Cristoforo Colombo, 44  
00147 ROMA

Tel: +39 06 5722 3461  
Fax: +39 06 5722 3491  
E-mail: [giangreco.roberto@minambiente.it](mailto:giangreco.roberto@minambiente.it)

**Certificate N°: 2243**

## LEBANON / LIBAN

### **WEHBE Samih (Dr)**

Ministry of Environment  
PO Box 70-1091  
ANTELIAS

Tel: +961 (4) 52 22 22  
Fax: +961 (4) 525 080 – 525 052  
E-mail: [s.wehbe@moe.gov.lb](mailto:s.wehbe@moe.gov.lb)

**Certificate N°: 2244**

### **KABBARA Nijad (Dr)**

National Centre for Marine Studies  
Physical Oceanography Unit  
PO Box 189  
JOUNIEH

Tel: +961 9 918 570  
Fax: +961 9 934 763  
E-mail: [nkabbara@cnrs.edu.lb](mailto:nkabbara@cnrs.edu.lb)

**Certificate N°: 2245**

### **EID G. Elie (Capt)\*\***

Private petroleum sector  
Techno Marine S.A.R.L.  
Bouchrieh, Barbar Abou Jaoude Str.,  
La Tour Building, 7<sup>th</sup> Floor,  
BEIRUT

Tel: +961 3 29 29 90  
Fax: +961 1 56 67 53  
E-mail: [navygroup@inco.com.lb](mailto:navygroup@inco.com.lb)

**Certificate N°: 2246**

*\*\* Participation not sponsored by REMPEC*

## LIBYA / LIBYE

### **AMER Mohamed Massoud (Dr.)**

Head, Office of Planning and Emergency Committee  
Environment General Authority (EGA)  
PO Box 83618  
El-Gheran, TRIPOLI

Tel: +218 (91) 213 52 91  
Fax: +218(21) 361 28 36  
E-mail: [ega@agalibya.org](mailto:ega@agalibya.org)  
[dr\\_amer@yahoo.com](mailto:dr_amer@yahoo.com)

**Certificate N°: 2247**

## **MALTA / MALTE**

**MALLIA Anthony**  
Advisor/O.S.C.  
Ministry Resources and Infrastructure  
C/o Oil Pollution Response Module  
Wied il-Kbir  
QORMI

Tel: +356 (21) 250 694,  
Mobile: +356 79494641  
Fax: +356 (21) 250 673  
E-mail: [tony.p.mallia@gov.mt](mailto:tony.p.mallia@gov.mt)

**Certificate N°: 2248**

**CINI Victor**  
Port Officer  
Malta Maritime Authority  
Marina Pinto  
VALLETTA VLT 01

Tel: +356 21 22 22 03 - 4  
Fax: +356 21 24 44 19  
E-mail: [victor.cini@mma.gov.mt](mailto:victor.cini@mma.gov.mt)

**Certificate N° : 2249**

## **MONACO**

**BOUCHET Pierre**  
Direction des Affaires Maritimes de Monaco  
Quai Jean Charles REY  
BP 468  
98012 MONACO Cedex

Tel: +377 93 158 678  
Fax: +377 93 153 715

**Certificate N° : 2250**

## **MOROCCO / MAROC**

**MARZAGUI Mohamed**  
Chef de la Division de la Navigation Maritime  
Bd Félix Houphoet  
Boigny-20000  
CASABLANCA

Tel : +212 22 27 37 90  
Fax : +212 22 27 33 40  
**(Mob.): +212 64 173 711**

**Certificate N° : 2251**

**FADLI Ahmed**  
Chef du Quartier Maritime de Tanger  
Quartier Maritime de Tanger  
TANGIER

Tel : +212 39 93 86 09  
Fax: +212 39 93 86 09  
**(Mob.): +212 66 088 883**

**Certificate N° : 2252**

## **SLOVENIA / SLOVENIE**

**PERKOVIC Marko**  
University of Ljubljana  
Faculty of Maritime Studies and Transportation  
Pot pomorscakov 4  
6320 Portoroz  
SLOVENIA

Tel: +386 05 6767 256  
Fax: +386 05 6767 257  
**(Mob.): +386 41 344 569**  
E-mail: [marko.Perkovic@fpp.edu](mailto:marko.Perkovic@fpp.edu)

**Certificate N° : 2253**

**BAJEC Primoz (Capt.)**  
Ministry of Transport and Communications  
The Slovenian Maritime Directorate  
Ukmarjev trg 2  
6000 KOPER  
SLOVENIA

Tel: +386 05 6632 108

**Certificate N° : 2254**

## **SPAIN / ESPAGNE**

**RODRIGUEZ CARBONELL Sergio**  
Head of Marine Environment Protection  
Spanish Maritime Safety Agency (SASEMAR)  
Ministry of Development  
Fruela, 3  
28011 MADRID

Tel: +34 (91) 755 91 00  
Fax: +34 (91) 755 91 39  
E-mail: [lcc@sasemar.es](mailto:lcc@sasemar.es)

**Certificate N° : 2255**

## **SYRIA / SYRIE**

**SHAHADEH Hussein**  
Chemical Engineer  
General Directorate of Ports  
Ministry of Transport  
P.O. Box 505  
Al Gazair Street  
LATAKIA

**CHAMSIN Fairouz**  
General Directorate of Ports  
Ministry of Transport  
P.O. Box 505  
Al Gazair Street  
LATAKIA

Tel: +963 (41) 472 593, 472 597  
Fax: +963 (41) 47 58 05  
E-mail: [danco@net.sy](mailto:danco@net.sy)

**Certificate N°: 2256**

**Certificate N°: 2257**

## TUNISIA / TUNISIE

**AOUNI Lamine**  
Centre National de Télédétection  
B.P. 200  
1080 TUNIS Cedex

Tel : +216 71 761 333  
Fax : +216 71 760 890  
E-mail : [cnt.dg@cnt.nat.tn](mailto:cnt.dg@cnt.nat.tn)

**Certificate N° : 2258**

**BOUGUERRA Larbi**  
Agence Nationale de Protection de l'Environnement (ANPE)  
Ministère de l' Agriculture, de l'Environnement et des Ressources  
Hydrauliques  
Rue de Cameroun  
1002 Belvédère  
BP. 52

Tel: +216 (73) 282 060  
**Mobile: +216 (98) 621 863**  
Fax: +216 (71) 848 069, 845 479  
E-mail: [Pol Mar @ anpe.nat.tn](mailto:Pol Mar @ anpe.nat.tn)

**Certificate N° : 2259**

## TURKEY/TURQUIE

**DURMAZ Hakan**  
Prime Ministry / Undersecretariat for Maritime Affairs  
General Directorate for Maritime Transport  
Denizcilik Musteparlyoy  
G.M.K. Bulvary N° 128  
Maltepe ANKARA 06570  
Turkey

Tel: +090 312 232 3849 / 2558  
Fax: +090 312 231 3306 / 232 0823  
E-mail: [h.durmaz@mynet.com](mailto:h.durmaz@mynet.com)

**Certificate N°: 2260**

**KALE Ufuk (Eng.)**  
Prime Ministry / Undersecretariat for Maritime Affairs  
General Directorate for Maritime Transport  
Denizcilik Musteparlyoy  
G.M.K. Bulvary N° 128  
Maltepe  
ANKARA 06570

Tel : +090 312 232 3850 / 2558  
**(Mob.): +090 543 556 2865**  
E-mail : [hufukkale@yahoo.com](mailto:hufukkale@yahoo.com)

**Certificate N°: 2261**

## **ITALY / ITALIE**

### **FARCHI Cristina\*\***

Research Biologist  
ICRAM  
Via di Casalotti, 330  
00166 ROMA

Tel : +39 (06) 6157.0455  
Fax : +39 (06) 6156.1906  
Website : [www.icram.org](http://www.icram.org)

**Certificate N° : 2262**

*\*\* Participation not sponsored by REMPEC*

### **GIORDANO Giuseppe (Dr)\*\***

Direzione Coordinamento Industriale e Sviluppo Aziendale  
Sistemi di sicurezza e Ambiente  
Eni S.p.A.  
Piazza Enrico Mattei 1  
00144 ROMA

Tel : +39 (06) 5982.5677  
Fax : +39 (06) 5982.2819  
E-mail : [giuseppe.Giordano@eni.it](mailto:giuseppe.Giordano@eni.it)

**Certificate N°: 2263**

*\*\* Participation not sponsored by REMPEC*

## **REMPEC – REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THE MEDITERRANEAN SEA**

### **R. Admiral PATRUNO Roberto, Director**

REMPEC  
Manoel Island  
Gzira, GZR 03  
MALTA

Tel: +356 21 33 72 96 / 21 33 72 97 / 21 33 72 98  
Fax: +356 21 33 99 51  
E-mail: [rempec@rempec.org](mailto:rempec@rempec.org)

### **Cdr SAMPATAKAKIS Elias, Programme Officer (HNS)**

REMPEC  
Manoel Island  
Gzira, GZR 03  
MALTA

Tel: +356 21 33 72 96 / 21 33 72 97 / 21 33 72 98  
Fax: +356 21 33 99 51  
E-mail: [esampatakakis@rempec.org](mailto:esampatakakis@rempec.org)

### **PACE Jonathan, Programme Officer (Prevention)**

REMPEC  
Manoel Island  
Gzira, GZR 03  
MALTA

Tel: +356 21 33 72 96 / 21 33 72 97 / 21 33 72 98  
Fax: +356 21 33 99 51  
E-mail: [jpace@rempec.org](mailto:jpace@rempec.org)

**ANNEX 1B**

Atelier « Imagerie satellitale et déversements illicites d'hydrocarbures en mer » -  
 Cedre / Commission Européenne  
 Workshop on "Satellite Imagery and illicit oil spills" Cedre / European Commission

**Toulon, du 02 au 04 octobre 2003**  
**2 – 4 October 2003, Toulon, France**

**LISTE DES PARTICIPANTS / LIST OF PARTICIPANTS / LECTURERS / FACILITATEURS**  
**/ CHAIRPERSONS SPONSORED BY THE EUROPEAN COMMISSION**

<b>NOM / FULL NAME</b>	<b>PAYS / COUNTRY</b>	<b>FONCTION / POSITION ORGANIZATION</b>	<b>ADRESSE / ADDRESS</b>
<b>PARTHIOT François</b> <b>Conférencier</b>	FRANCE	Cedre – Délégué pour la Méditerranée	Tel: +33.(0)4.94.30.48.87 Fax: +33 (0) 494 30 44 15 E-mail: <a href="mailto:francois.parthiot@le-cedre.fr">francois.parthiot@le-cedre.fr</a>
<b>ROY Daniel</b> <b>Conférencier</b>	FRANCE	Cedre – Chargé de mission juridique	715, Rue Alain Colas CS 41836 29218 Brest cedex 1 - France Tel/Fax: +33. (0) 2.98.33.10.10/44.91.38 E-mail: <a href="mailto:daniel.roy@le-cedre.fr">daniel.roy@le-cedre.fr</a>
<b>GUEZENEC Claudine</b> <b>Assistante Cedre</b>	FRANCE	Cedre – Assistante du Directeur	715, Rue Alain Colas CS 41836 29218 Brest cedex 1 - France Tel/Fax: +33. (0) 2.98.33.10.10/44.91.38 E-mail: <a href="mailto:claudine.guezenec@le-cedre.fr">claudine.guezenec@le-cedre.fr</a>
<b>BEAU Natalie</b> <b>Cedre</b>	FRANCE	Cedre	715, Rue Alain Colas CS 41836 29218 Brest cedex 1 - France Tel/Fax: +33. (0) 2.98.33.10.10/44.91.38 E-mail: <a href="mailto:natalie.beau@le-cedre.fr">natalie.beau@le-cedre.fr</a>
<b>KERAMBRUN Loïc</b>	FRANCE	Cedre	715, Rue Alain Colas CS 41836 29218 Brest cedex 1 - France Tel/Fax: +33. (0) 2.98.33.10.10/44.91.38 E-mail: <a href="mailto:loic.kerambrun@le-cedre.fr">loic.kerambrun@le-cedre.fr</a>
<b>GARNIER Jean-René</b> <b>Président de séance</b>	FRANCE	Secrétaire Général de la Mer	16 Bd Raspail – 75007 Paris
<b>FILLON Jean-Louis</b>	FRANCE	PREMAR / Adjt Préfet Mar. (Cre Gal)	PREMAR-Med Tel: +33 (4) 94 020 376 Fax: +33 (4) 94 021 363 E-mail: <a href="mailto:Premartoulonaem@hotmail.com">Premartoulonaem@hotmail.com</a>
<b>HECHES Marianne</b> <b>Extérieur</b>	FRANCE	Directeur Adjoint CROSS MED – La Garde	Tel : +33(4) 94 617 110 Fax: +33(4) 94 271 149 E-mail: <a href="mailto:cross-lagardeequipement.gouv.fr">cross-lagardeequipement.gouv.fr</a>
<b>HERROUIN Guy</b> <b>Extérieur</b>	FRANCE	Directeur Centre Ifremer de Méditerranée	E-mail: <a href="mailto:guy.herrouin@ifremer.fr">guy.herrouin@ifremer.fr</a>
<b>VRAC Stéphanie</b> <b>Extérieur</b>	FRANCE	CMO /EPSHOM	13, rue du Chatelier BP 30316-29603 Brest Cedex Tel: +33 (2) 98 37 77 59 Fax : - E-mail: <a href="mailto:vrac@shom.fr">vrac@shom.fr</a>
<b>CUBERO-CASTAN Eliane</b> <b>Conférencier</b>	FRANCE	Membre du Secrétariat Exécutif de la Charte Internationale « Espace et Catastrophes Majeures » en tant que représentant du CNES	CNES 18, Avenue Edouard Belin 31401 Toulouse Cedex 04 Tel: +33 (0)5 61 27 46 12 Fax: +33 (0)5 61 28 27 01 E-mail: <a href="mailto:eliane.cubero-castan@cnes.fr">eliane.cubero-castan@cnes.fr</a>
<b>TARCHI Dario</b> <b>Conférencier</b>	Commission Européenne	EC Scientific Officer –Sector Head Project Leader	EC – JRC – Institute for the Protection and Security of the Citizen HSU – Via E. Fermi 1, 21020 ISPRA (VA) Tel: +39 0332 785143 Fax: +39 0332 785469 E-mail: <a href="mailto:dario.tarchi@jrc.it">dario.tarchi@jrc.it</a>

NOM / FULL NAME	PAYS / COUNTRY	FONCTION / POSITION ORGANIZATION	ADRESSE / ADDRESS
<u>FUSCO</u> Luigi <b>Conférencier</b>	ESA ITALIE / ITALY	ESA-ESRIN Remote sensing department	Via Galileo Galilei 00044 Frascati (RM) Italy Tel: - Fax: - E-mail: <a href="mailto:Luigi.fusco@esa.int">Luigi.fusco@esa.int</a>
<u>PATRUNO</u> Roberto <b>Conférencier</b>	REMPEC	REMPEC - Director	Manoel Island Gzira GZR 03 - Malta Tel: +356 21.33.72 96/8 Fax: +356 21 33 99 51 E-mail: <a href="mailto:rempec@rempec.org">rempec@rempec.org</a>
<u>FAGO</u> Thomas <b>Conférencier</b>	HELCOM SUEDE / SWEDEN	Commodore - Chief of Response Department at the Swedish Coastguard HQ	Box 536- SE-371 23 Karlskrona Tel : +46 455 35 34 55 – Fax: +46 455 105 21 E-mail: <a href="mailto:thomas.fago@coastguard.se">thomas.fago@coastguard.se</a>
<u>HUISMAN</u> Sjon <b>Conférencier et Délégué CE</b>	BONN AGEEMENT PAYS-BAS THE NETHERLANDS	Head Response Organisation Ministry of Transport, Public Works & Water Management	P.O. Box 5807 2280 HV Rijswijk – NL Tel: + 31 70 336 6631 Fax: + 31 70 395 1724 E-mail: <a href="mailto:j.huisman@dnz.rws.minvenw.nl">j.huisman@dnz.rws.minvenw.nl</a>
<u>CHABASON</u> Lucien <b>Conférencier</b>	PNUE/PAM - Athènes	Coordinator MEDU	Box 18019 GR 11610 Athens Tel: +30 210 727 3101 Fax: +30 210 725 3196 E-mail: <a href="mailto:chabason@unepmap.gr">chabason@unepmap.gr</a>
<u>VINCENT</u> Gilles <b>Représentant CE</b>	Commission Européenne	DG ENV. B4	BU-9 6/139 - B-1049 Bruxelles Tel: +32 (2) 296 95 14 Fax: +32(2) 299 03 14 E-mail: <a href="mailto:gilles.vincent@cec.eu.int">gilles.vincent@cec.eu.int</a>
<u>STONE</u> Toby <b>Conférencier</b>	MCA/GB	Head of Counter Pollution and Response Maritime and Coastguard Agency	Spring Place, 105 Commercial Road Southampton, SO15 1EG Tel : +44 2380 329425 or +44 7714 345620 Fax: +44 2380 329445 E-mail: <a href="mailto:toby_stone@mcca.gov.uk">toby_stone@mcca.gov.uk</a>
<u>PAUTROT-CESARO</u> Cathy <b>Déléguée CE</b>	FRANCE	Vice-procureur	TGI 6, rue Joseph Autran 13281 Marseille Cedex 06 Tel: +33 (4) 91 15 50 50 Fax: +33 (4) 91 15 53 91 E-mail: -
<u>ERHARDT</u> Jean-Bernard <b>Délégué CE</b>	FRANCE	PREMAR/ chef div. AEM (AC2AM)	PREMAR-Med Tel: +33 (4) 94 021 086 Fax: +33 (4)94 021 363 E-mail: <a href="mailto:premartoulon_aem@hotmail.com">premartoulon_aem@hotmail.com</a>
<u>BELLINI</u> Mauro <b>Délégué CE</b>	ITALIE / ITALY	Captain in the Navy – Consultant	Ministero dell'Ambiente Roma Tel: +39 0586 491364 Fax: - E-mail : <a href="mailto:blinus@sysnet.it">blinus@sysnet.it</a>
<u>MASONE</u> Iliaria <b>Déléguée CE</b>	ITALIE / ITALY	Consultant at the Italian Ministry of the Environment – Sea Protection Department	Via Cristoforo Colombo, 44 – 00147 Roma Tel office: +39 06 5722 3461 Mobile: +39 338 6754 723 Fax: +39 06 5722 3491 E-mail: <a href="mailto:masone.ilaria@minambiente.it">masone.ilaria@minambiente.it</a>



NOM / FULL NAME	PAYS / COUNTRY	FONCTION / POSITION ORGANIZATION	ADRESSE / ADDRESS
<b>FALK STRAND</b> Kristina <b>Déléguée CE</b>	SUEDE / SWEDEN	Legal Advisor at the Law Enforcement Department at the Swedish Coast Guard HQ	Box 536 SE-371 23 Karlskrona, Sweden Tel: +46 455 35 34 37 Fax: +46 455 105 21 E-mail: <a href="mailto:kristina.falk-trand@kustbevakningen.se">kristina.falk-trand@kustbevakningen.se</a>
<b>WILLMAN</b> Ronnie <b>Délégué CE</b>	SUEDE / SWEDEN	Commander – Head of Operational Flightplanning Swedish Coast Guard HQ – Flight Command	Box 536, SE-371 23 Karlskrona, Sweden Tel: +46 455 35 35 52 Fax: +46 455 105 21 Mobile: +46 70 822 41 34 E-mail: <a href="mailto:ronnie.willman@kustbevakningen.se">ronnie.willman@kustbevakningen.se</a>
<b>VISSER</b> Michiel <b>Délégué CE</b>	PAYS-BAS THE NETHERLANDS	Operator Pollution Control Operational affairs – Department of Law Enforcement & Emergency Response North Sea Directorate Ministry of Transport, Public Works & Water Management	Koopmansstraat 1 2280 HV Rijswijk – The Netherlands Tel: +31 (0)70 3366791 Fax: +31 (0)70 3951724 E-mail: <a href="mailto:m.visser@dnz.rws.minvenw.nl">m.visser@dnz.rws.minvenw.nl</a>
<b>DONNAY</b> Eric <b>Délégué CE</b>	BELGIQUE	Surveillance aériennes et urgences environnementales UGMM de l'Institut Royal des Sciences Naturelles de Belgique	Gulledelle 100 - B-1200 Bruxelles Tel: +33 2 773 21 11 (general) Mobile: +32 477 25 90 05 E-mail: <a href="mailto:e.donnay@mumm.ac.be">e.donnay@mumm.ac.be</a>
<b>LOICQ</b> Benoît <b>Délégué CE</b>	BELGIQUE	Surveillance aériennes et urgences environnementales UGMM de l'Institut Royal des Sciences Naturelles de Belgique	Gulledelle 100 - B-1200 Bruxelles Tel: +33 2 773 21 11 (general) Mobile: +32 475 91 77 24 E-mail: <a href="mailto:b.loicq@mumm.ac.be">b.loicq@mumm.ac.be</a>
<b>McCABE</b> Katie <b>Déléguée CE</b>	GB	Offshore Environmental Inspector	Department of Trade & Industry Energy Group – Licensing & Consents Unit Offshore Environment & Decommissioning Atholl House 86-88 Guild Street – Aberdeen AB11 6AR Tel: +44 (0) 1224 254080 Fax: +44 (0) 1224 254019 E-mail: <a href="mailto:katie.mccabe@dti.gsi.gov.uk">katie.mccabe@dti.gsi.gov.uk</a>
<b>REID</b> Michael <b>Délégué CE</b>	GB	Senior Investigations Officer	Department of Trade & Industry Energy Group – Licensing & Consents Unit Offshore Environment & Decommissioning Atholl House 86-88 Guild Street – Aberdeen AB11 6AR Tel: +44 (0) 1224 254035 Fax: +44 (0) 1224 254019 E-mail: <a href="mailto:michael.reid@dti.gsi.gov.uk">michael.reid@dti.gsi.gov.uk</a>
<b>TAHVONEN</b> Kati <b>Déléguée CE</b>	FINLANDE FINLAND	Remote Sensing method Developer	Finnish Environment Institute P.O. Box 140, FIN-00251, Helsinki Tel: +358 9 40 300 695 Fax: +358 9 40 300 690 E-mail: <a href="mailto:kati.tahvonen@ymparisto.fi">kati.tahvonen@ymparisto.fi</a>
<b>HAAPASAARI</b> Heli <b>Déléguée CE</b>	FINLANDE FINLAND	Inspector – Oil combating specialist	Finnish Environment Institute P.O. Box 140, FIN-00251, Helsinki Tel: +358 9 40 300 113 Fax: +358 9 40 300 478 E-mail: <a href="mailto:heli.haapasaari@ymparisto.fi">heli.haapasaari@ymparisto.fi</a>
<b>VILLANUEVA</b> F. Javier <b>Délégué CE</b>	ESPAGNE / SPAIN	Head of Maritime Pollution Dpt	Dirección General de la Marina Mercante c/Ruiz de Alarcón, 1 – 28071 Madrid Tel: +34 91 597 92 73 Fax: +34 91597 93 35/87 E-mail: <a href="mailto:fjvillanueva@mfom.es">fjvillanueva@mfom.es</a>

NOM / FULL NAME	PAYS / COUNTRY	FONCTION / POSITION ORGANIZATION	ADRESSE / ADDRESS
<u>RUIZ de LOBERA</u> Alfonso <b>Délégué CE</b>	ESPAGNE / SPAIN	Captain Jefe de Area de Estudios y Relaciones Internacionales	Sociedad de Salvamento y Seguridad Marítima (SASEMAR) Tel: +34 91 7559100 Fax: +34 91 7559139 E-mail: <a href="mailto:interoper@sasemar.es">interoper@sasemar.es</a>
<u>ALBURQUERQUE</u> Gracia <b>Déléguée CE</b>	ESPAGNE / SPAIN	Technical Advisor	Sociedad de Salvamento y Seguridad Marítima (SASEMAR) Tel: +34 917559100 Fax: +34 917559139 E-mail: <a href="mailto:alburquerque.lcc@sasemar.es">alburquerque.lcc@sasemar.es</a>
<u>HENRIQUE ISIDRO VALENTE</u> Raul <b>Délégué CE</b>	PORTUGAL	Captain – General Director of Maritime Authority Advisor	Direcção Geral da Autoridade Marítima Praça do Comercio – 1100-148 Lisboa Tel: +351213469221 Mobile: +351917583825 Fax: +351213424137 E-mail: <a href="mailto:dgam_scpmh@sapo.pt">dgam_scpmh@sapo.pt</a>
<u>DA COSTA VENTURA SOARES</u> Carlos Manuel <b>Délégué CE</b>	PORTUGAL	Commander – Portuguese Hydrographic Institute Head, Oceanography Division	Instituto Hidrografico Rua Das Trinas, 49 1249-093 Lisboa Tel: +351 21 0943 030 Fax: +351 21 0943 299 E-mail: <a href="mailto:ventura.soares@hidrografico.pt">ventura.soares@hidrografico.pt</a>
<u>CLONAN</u> Eugene <b>Délégué CE</b>	IRLANDE / IRELAND	Marine Pollution & Salvage Manager – Irish Coast Guard	Irish Coast Guard Dept of Communications, Marine & Natural Resources Leeson Lane - Dublin 2 - Ireland Tel (land line): +353 1 6782305 Mobile: +353 87 2246509 Fax: +353 1 6782259 E-mail: <a href="mailto:eugene.clonan@dcmnr.ie">eugene.clonan@dcmnr.ie</a>
<u>NJØTEN</u> Ove <b>Délégué CE</b>	NORVEGE / NORWAY	Executive Officer in charge of Aerial Surveillance, satellite and fixed wing, Norway	Norwegian Coastal Administration Department of Emergency Response P.O. Box 55, Haakonsvern, NO-5886, Bergen Tel: +47 55 50 89 85 Fax: +47 55 50 89 95 E-mail: <a href="mailto:ove.njoten@kystverket.no">ove.njoten@kystverket.no</a>
<u>TUFTE</u> Lars <b>Délégué CE</b>	ALLEMAGNE / GERMANY	Scientist – Department of Physics, Instruments and Measurements	Federal Institute of Hydrology Am Mainzer Tor 1 D-56068 Koblenz, Germany Tel: +49 261 1306-5413 Fax: +49 261 1306-5363 E-mail: <a href="mailto:tufte@bafg.de">tufte@bafg.de</a>

## ANNEX II

# EUROPEAN WORKSHOP « SATELLITE IMAGERY AND ILLEGAL OIL SPILLS IN EUROPE AND THE MEDITERRANEAN » 2-4 Octobre 2003, Toulon, France

Day 1 : Thursday 2-10-2003

*Chair* : L. Chabason, MAP  
*Secretary* : F. Parthiot, Cedre

09.00-0930

*Opening of the workshop.*

- *Mediterranean Maritime Prefect*
- *European Commission*
- *Director of REMPEC*

09.30-10.15

The Barcelona Convention, the Mediterranean Action Plan (MAP) and the Mediterranean situation.

*L.Chabason*

10.15-11.00

The Helsinki Convention and Baltic sea surveillance  
*T.Fagö*

*11.00-11.30 Coffee break*

11.30-12.30

The Bonn Agreement and the North sea surveillance  
*S. Huisman*

*12.30-14.00 Lunch*

14.00-16.00

Ongoing and scheduled projects aiming at improving sea surveillance

*D.Tarchi/L. Fusco*  
*E. Cubero-Castan*

*16.00-16.30 Coffee break*

16.30-17.00

Practical use of satellite imagery for large pollution monitoring and prosecution : technical advisers views

*T.Stone/F.Parthiot*

17.00-18.00

*Meeting of Chairs, Facilitators and Secretaries to prepare the round tables*

Day 2 : Friday 3-10-2003

*Facilitators* : L. Fusco, ESA  
and D. Roy, Cedre

09.00-09.30

*Introduction to two parallel round tables: detection techniques (DET), mutual information and prosecution procedure (MIP)*

09.30-12.30

DET round table : exchange of information on tools in use or soon available, *facilitated by L. Fusco.*

MIP round table: exchange of information on prosecution improvement in the Mediterranean, *facilitated by D. Roy*

*12.30-14.00 Lunch*

14.00-15.30

Formulation and wrapping up of draft conclusions of the two round tables.

*15.30-16.00 Coffee Break*

16.00-18.00

*Discussion chaired by Mr. J.R Garnier, Secrétaire général de la Mer, France*  
Presentation of the draft conclusions to the representatives of the Mediterranean countries, improvement of those conclusions.

*18.00 : cocktail party at hotel Mercure*

Day 3 : Saturday 4-10-2003

*Chair : R. Patruno REMPEC  
Secretary : M. Girin, Cedre*

09.00-10.30

Revision and finalisation of the DET and MIP proposals.

*10.30-11.00 Coffee Break*

11.00-12.30

Global discussion of the participants on the proposals

*12.30-14.00 Lunch*

14.00-15.30

*Chairs, Facilitators and Secretaries:*

Finalisation of the final document to be delivered to the participants

14.00-17.00

Study tour for all other participants  
(weather permitting)

**Contact us at  
[contact@le-cedre.fr](mailto:contact@le-cedre.fr)**

**Venue of the workshop :**

**hotel Mercure, place  
Besagne, Toulon  
tel : +33 (0) 498 008 100  
fax : +33 (0) 494 415 751**

## ANNEX III

### LIST OF LECTURERS

#### UNEP / MAP – UNITED NATIONS ENVIRONMENT PROGRAMME COOPERATING UNIT FOR THE MEDITERRANEAN ACTION PLAN

##### **CHABASON Lucien**

Coordinator MEDU  
Box 18019  
GR 11610 ATHENS

Tel: +30 210 727 3101  
Fax: +30 210 725 3196  
E-mail: [chabason@unepmap.gr](mailto:chabason@unepmap.gr)

##### **HELSINKI COMMISSION**

##### **FAGO THOMAS**

Commodore – Chief of Response Department  
at the Swedish Coastguard HQ  
Box 536  
SE-371 23 KARLSKRONA  
Sweden

Tel: +46 455 35 34 55  
Fax: +46 455 105 21  
Email: [thomas.fago@coastguard.se](mailto:thomas.fago@coastguard.se)

##### **BONN AGREEMENT**

##### **HUISMAN Sjon**

Head Response Organisation  
Ministry of Transport  
Public Works & Water Management  
P.O. Box 5807  
2280 HV Rijswijk  
The Netherlands

Tel: +31 70 336 6631  
Fax: +31 70 395 1724  
E-mail: [j.huisman@dnz.rws.minvenw.nl](mailto:j.huisman@dnz.rws.minvenw.nl)

##### **EUROPEAN COMMISSION**

##### **TARCHI Dario**

EC Scientific Officer – Sector Heas  
Project Leader  
EC – JRC – Institute for the Protection and Security of the Citizen  
HSU – Via E. Fermi 1  
21020 ISPRA (VA)  
Italy

Tel : +39 03 32 785 143  
Fax : +39 03 32 785 469  
E-mail : [dario.tarchi@esa.int](mailto:dario.tarchi@esa.int)

## **EUROPEAN SPACE AGENCY (ESA)**

### **FUSCO Luigi**

ESA – ESRIN  
Remote Sensing Department  
Via Galileo Galilei  
00044 FRASCATI (RM)  
Italy

Tel : n/a  
Fax : n/a  
E-mail : [Luigi.fusco@esa.int](mailto:Luigi.fusco@esa.int)

## **CNES**

### **CUBERO-CASTAN Eliane**

Membre du Secrétariat Exécutif de la Charte Internationale  
« Espace et Catastrophes Majeures »  
CNES  
18, Avenue Edouard Belin  
31401 TOULOUSE Cedex 04  
France

Tel: +33 (0) 5 61 27 46 12  
Fax: +33 (0) 5 61 28 27 01  
E-mail: [eliane.cubero-castan@cnes.fr](mailto:eliane.cubero-castan@cnes.fr)

## **UK MARITIME AND COASTGUARD AGENCY**

### **STONE Toby**

Head of Counter Pollution and Response  
Maritime and Coastguard Agency  
Spring Place  
105, Commercial Road  
SOUTHAMPTON SO15 1EG  
UK

Tel: +44 2380 329 425 / 7714 345 620  
Fax: +44 44 2380 329 445  
E-mail : [toby\\_stone@mcga.gov.uk](mailto:toby_stone@mcga.gov.uk)

## **CENTRE DE DOCUMENTATION DE RECHERCH ET D'EXPERIMENTATION SUR LES POLLUTIONS ACCIDENTELLES DES EAUX (CEDRE)**

### **PARTHIOT François**

CEDRE – Délégué pour la Méditerranée  
715, rue Alain Colas  
CS 41836  
29218 BREST cedex 1  
France

Tel / Fax : +33 (0) 2 98 33 10 10 / 44 91 38  
E-mail : [francois.parthiot@le-cedre.fr](mailto:francois.parthiot@le-cedre.fr)

## **ANNEX IV**

### **LIST OF DOCUMENTS**

1. The Helsinki Convention and Baltic Sea surveillance, T. Fago, HELSINKI COMMISSION.
2. The Bonn Agreement and the North Sea surveillance, S. Huisman, BONN AGREEMENT.
3. Ongoing and scheduled projects aiming at improving sea surveillance, D. Tarchi / L. Fuscho / E. Cubero-Castan, EC / ESA-ESRIN / CNES.
4. Practical use of satellite imagery for large polluting monitoring and prosecution – technical advisors view, T. Stone / F. Parthiot, UK – MCA / CEDRE.

**ANNEX V**

**EUROPEAN WORKSHOP**

**« SATELLITE IMAGERY AND ILLEGAL OIL SPILLS IN EUROPE AND  
IN THE MEDITERRANEAN »**

**Toulon, France, 2 – 4 October 2003**

**FINAL RECOMMENDATIONS**

Round table 1 :  
**« DETECTION TECHNIQUES »**

Round table 2 :  
**« MUTUAL INFORMATION AND PROSECUTION PROCEDURES »**



## **1 - ROUND TABLE ON DETECTION TECHNIQUES**

- **IDENTIFIED ISSUES**

- Lessons of the past experience
- Operational surveillance
- Information system

- **OBJECTIVES OF ROUND TABLE**

- Discuss issues and propose recommendations concerning each issue

- **MAIN LESSONS LEARNED FROM PAST EXPERIENCE (1)**

- Current situation in the Baltic and North seas: in both sea areas aerial surveillance by remote sensing aircraft has contributed to building up a long experience in the detection of illegal discharges. Several member states have co-operated over the past decade to gain experience in the use of satellite SAR imagery.
  - Current situation in the Mediterranean sea: a number of dedicated project are going on but there is not yet practical application, and in addition the aircraft surveillance capacity is insufficient to allow for extended joint experiment and to derive operational experience.
  - summary of the Baltic and North sea experience
    - ◆ Technical and operational capabilities vary a lot according to regions
    - ◆ Combined operation and reports to all participating/interested countries and parties
    - ◆ Development of operational experiences by an exchange of experts
  - satellite SAR imagery is a tool that complements other remote sensing and visual resources (e.g. flexibility of airborne surveillance, versus long term statistical observation, importance of in-situ measurements) and models
  - Improve or initiate exploitation of existing aerial/satellite surveillance data from recent and past projects and campaigns ; need to continue to carry out research activities in the field of satellite surveillance aimed at practical operational applications
  - Use of information in (near) real time and in slow time (including access to historical data set) depending on operational needs
  - Space data access cost implies definition of priorities. (envisage negotiation for the acquisition at the lowest possible costs when pollution and prevention activities are concerned)
  - Interface with GIS systems (e.g. for digital charts and sensitivity mapping)
  - Use these experiences to define operational requirements for future satellite surveillance
- **OPERATIONAL SURVEILLANCE (2)**
- Separate needs for routine operational surveillance and emergency monitoring.
  - Enhance co-operation with Civil Protection across Mediterranean countries for emergency response at the intercoastal zone.

- Synergy with other operational systems (e.g.: VTS, AIS) for ship location and identification and with emerging technologies (e.g.: GALILEO for precise positioning, hyperspectral sensors)
- Review of end user requirements (e.g. petroleum products + hazardous and noxious substances, timeline, coverage, continuity of data access, quality of derived information, location, standards of reporting, met-oceano data...)
- Short and long term objectives : need for a strict and repeated surveillance of the sea area leading to a strong deterrence
- Reduction of surveillance costs to ensure long term sustainability. This is one of the most important challenges.
- As the development of satellite surveillance is very costly for small countries, specific transnational pilot projects within the MEDA and other or new co-operation programmes, even at regional and sub-regional level, should be developed to mitigate the relevant costs.

• **INFORMATION SYSTEM (3)**

- establishing local and overall statistics and deriving trends in the coming years at least for the threatened regions (experience in ongoing projects and in GMES initiative)
- Consider integration of aircraft, satellites and port state controls data (e.g. for optimisation of available flight time)
- Generation of risk mapping first, and eventually sensitivity mapping. (e.g.:*Proposal under discussion at REMPEC with participating countries*)
- the information system should be operated at regional ( e.g. *REMPEC role in the Mediterranean sea*) and country level and should interface other operational relevant systems, met-oceano services...
- The information system should consider networking and compatibility of configurations for meeting regional and local operational needs

**2- ROUND TABLE ON MUTUAL INFORMATION AND PROSECUTION PROCEDURES**

• **IDENTIFIED ISSUES**

- Evidence
- Operational procedures re-routing and inspection
- Mutual information

• **OBJECTIVES OF ROUND TABLE**

- Discuss issues and propose recommendations concerning each issue

## • **EVIDENCE (1)**

### **considerations (1)**

- SAR (*Synthetic Aperture Radar*) satellite imagery enables the detection of surface anomalies such as oil slicks and the presence of vessels related or not to such slicks.
- Satellites provide localisation and slick size in addition to the data and the time of acquisition.
- Satellite imagery only delivers part of the evidence of an offence, as it does not identify the vessel or the type of pollutant. Consequently, satellite imagery is only a tool to be used in conjunction with visual reconnaissance or sampling.
- Observers need to be trained to produce clear reports and documents that would be easily understood by magistrates. These magistrates will also to be trained so that they can exploit evidence to the full.

### **Recommendations (1)**

- As satellite imagery is highly technical and marine pollution issues so specific, it is recommended to appoint and train specialised investigators, prosecutors and magistrates.
- For the operational use of satellite imagery, it is recommended that each country avail itself of an aerial surveillance program that will complement and validate satellite detection so as to have all the necessary information to prosecute offenders.
- In order to provide the necessary operational capacity for airborne and shipborne surveillance of marine pollution, a plan to build the capacity of Mediterranean states should be considered.

## • **OPERATIONAL PROCEDURES, RE-ROUTING AND INSPECTION (2)**

### **considerations (2)**

- Taking action against offenders detected by satellite imagery involves also the same instruments as those used by other sensing methods.
- The Law of the Sea Convention and the relevant international and regional instruments enable states to intervene (inspect vessel, ...) at sea and in their harbours.
- Response must be proportional to the pollution threat.
- Satellite imagery can be used as a trigger for targeted aerial surveillance.
- When the polluting vessel is no longer connected with the oil slick, information from satellite imagery used in conjunction with information from airborne reconnaissance may allow in some cases to reconstruct the track of the suspected vessel and establish the link between the oil slick and that vessel.
- The option of re-routing a vessel should only be envisaged as a last resort if you have clear evidence and requisite response resources.
- The controls provided for by international agreements should be carried out (e.g. Port State Control).
- The designation of areas enjoying particular protection measures may improve the protection against pollution. However, the implementation of this kind of measures is complex.

## **Recommendations (2)**

- It is recommended that a transnational approach to the acquisition of satellite imagery be undertaken in order to increase the amount of information for the prosecution of offenders.
- In the event of on board intervention it is recommended to implement direct link between operational control authorities and judicial authorities at national and transnational level.
- It is recommended to use all the provisions of the Law of the sea in order to have a legal basis for intervention to deal with marine pollution issues and in particular those outside territorial waters.

## **• MUTUAL INFORMATION (3)**

### **considerations (3)**

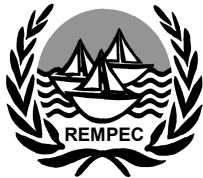
- Satellite data enables statistical mapping and the identification of areas at risk.
- Using the satellite imagery as a part of evidence for prosecution must essentially focus on these areas and may also provide an evaluation of the efficiency of the enforcement system.
- Each state will or has, in its code of criminal procedure, set fines and sanctions.
- Discrepancies in those deterrence tools may induce a shift of the problem to countries applying more lenient sanctions.
- Some states keep an updated record of the cases brought to court. Recent initiatives have been conducted to pool this information.
- There are two regimes of penalties:
  - ◆ administrative sanctions involving fines that are proportional to damage sustained will be immediately payable,
  - ◆ criminal procedure is often longer but involves steeper fines.
- The current trend is that not only the master but also the vessel operator(s) will be held liable.

## **Recommendations (3)**

- It is recommended to extend liability to other parties involved in ship management rather than to limit such liability only to the master as is the case in a number of countries
- It is recommended to implement an exchange of information on legislation and sanctions in different countries.
- It is recommended to encourage the exchange and the compilation of information in database regarding prosecution as well as regarding procedures of investigations (e.g. North Sea Network, Helcom).
- The establishment of rapid notification procedures to flag states must be encouraged.



IMO



REMPEC



MAP



UNEP

**REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE  
FOR THE MEDITERRANEAN SEA  
(REMPEC)**



# CERTIFICATE

**No.**

This is to certify that

---

has attended the

**EUROPEAN WORKSHOP  
«SATELLITE IMAGERY AND ILLEGAL OIL SPILLS IN EUROPE  
AND THE MEDITERRANEAN»**

**Toulon, France, 2 – 4 October 2003**

*organized by*

**CENTRE DE DOCUMENTATION DE RECHERCHE ET D'EXPERIMENTATIONS  
SUR LES POLLUTIONS ACCIDENTELLES DES EAUX – CEDRE**

*with the financial support of the*

**EUROPEAN COMMISSION**

*Participation in the Workshop was financed by the*

**REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE  
FOR THE MEDITERRANEAN SEA  
(REMPEC)**

*within the framework of the*

**MEDITERRANEAN ACTION PLAN**




---

Rear Admiral Roberto PATRUNO  
*Director*



Group photo of participants during field visit to FOST at Rognac