



GLOBALLAST PARTNERSHIPS PROJECT

**EUROPEAN UNION FUNDED SAFEMED PROJECT
(MED 2005/109-573)**

Training Course on Port Biological Baseline Surveys

21-24 October 2008

Gebze (Istanbul), TURKEY

REPORT



BACKGROUND

Over the past two decades, ships' ballast water has been recognized as one of the major vectors for the introduction of harmful aquatic organisms and pathogens into aquatic environment and the introduction of invasive species was recognised as one of the four biggest threats to the marine environment.

IMO's activities to address this issue have included the development of a regulatory regime culminating in the adoption of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) in February 2004, as well as the GloBallast Programme, which included a pilot phase addressing the issue in six Pilot Countries (2000-2004) and a follow-up phase (GloBallast Partnerships Project 2008-2012) to be implemented in six priority regions, including the Mediterranean.

The project was developed as a joint initiative of the Global Environment Facility (GEF), the United National Development Programme (UNDP) and the International Maritime Organization (IMO) with the following objectives:

- assisting developing countries to reduce the transfer of harmful aquatic organisms and pathogens in ships' ballast water;
- building capacity to address the ballast water issues;
- undertaking legal, policy and institutional reform; and,
- implementing the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) adopted under the aegis of IMO.

In order to facilitate the implementation of the Project in the Mediterranean region, REMPEC was identified as the Regional Coordinating Organisation (RCO) in consideration of the close linkages with IMO and of the relevance of the Partnership's objectives to the mandate of the Centre. As the RCO, REMPEC is responsible for the preparation and organization of regional-tier activities including training courses/workshops and meetings (Regional Task Force Meetings) which are carried out under the project.

INTRODUCTION

It is very well known that the worldwide spread of non indigenous marine organisms occurs through many different pathways, such as:

- Natural dispersion
- Range expansion (climate change)
- Intentional introductions (fisheries/mariculture)
- Unintentional introductions (canal developments, marine debris, shipping)
- Escape or release from aquaria

Among these, shipping is considered to be one of the most important. At present ballast water is recognised as one of the principal vectors of potentially invasive alien species, being responsible for the transfer of between 7,000 and 10,000 different species of marine microbes, plants and animals globally each day (Carlton, 1999).

Major shipping ports are usually the first places where alien species are introduced and may become established.

The first step in controlling and managing non indigenous species is to investigate what they are and where they are. To this end, port biological baseline surveys (PBBS) may become fundamental, as they provide a baseline list of species which are present in the port that can be used for a risk assessment study or as a reference point for ongoing monitoring and management of non native species.

In view of this, a regional Training Course on Port Biological Baseline Surveys was organized within the framework of the GEF-UNDP-IMO GloBallast Partnerships Project and financed by the EU-funded MEDA Regional Project “Euromed Cooperation on Maritime Safety and Prevention of Pollution from Ships – SAFEMED” (MED 2005/109-573)¹, as part of its Activity 3, which addresses the protection of the marine environment, and in particular its Task 3.3 O which refers to the issue of ballast water management.

The PBBS Training Course was also a follow-up of the Introductory Training Course on Ballast Water Management Issues, which was held in Alexandria, Egypt, in April 2008, being the second regional capacity building activity being implemented in the Mediterranean region within the GloBallast Partnerships Project.

¹ The SAFEMED Project, a European Union (EU) financed MEDA regional project being implemented by REMPEC in ten Euromed Mediterranean partners, namely Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Syria, Tunisia and Turkey, aims at mitigating the existing imbalance in the application of maritime legislation in the region between the Mediterranean Partners that are not members of the EU and those who are members, through promoting a coherent, effective and uniform implementation of the relevant international conventions and rules aimed at better protection of the marine environment in the Mediterranean region by having safer shipping and preventing pollution from ships.

The course, which took place in Gebze (Istanbul), Turkey, between the 21st and 24th of October 2008, was hosted by the Scientific and Technological Research Council (TUBITAK) of Turkey and organized by REMPEC in cooperation with the Undersecretariat for Maritime Affairs of the Republic of Turkey.

1. AIMS OF THE TRAINING

The main objective of this course was to provide theoretical and practical training on how to plan, prepare and conduct a port biological baseline survey (PBBS) for introduced marine pests using standardized protocols.

Similarly to previous activities already implemented within the GloBallast Partnerships project, this course was aimed at building the necessary capacity in the region but also to provide a train-the-trainer opportunity, in order to replicate similar training to a range of stakeholders at national level.

1.1 Lecturers

The training course was held by two experts from NIWA (the New Zealand National Institute of Water and Atmospheric Research), namely Dr. Graeme Inglis and Dr. Oliver Floerl, both having a long experience and outstanding knowledge on Port Biological Baseline Surveys. Moreover, Dr. Murat Bilecenoglu from the Adnan Menderes University of Turkey and Ms. Limor Shoval from the National Institute of Oceanography of Israel provided the participants with an overview of the situation regarding the presence of non indigenous species in the Mediterranean region. In addition, Capt. Cahit Istikbal, from the Turkish Maritime Pilots Association, delivered a presentation on shipping and port safety in Izmit Bay. The list of lecturers is given in **Annex I**.

1.2 Profiles of Participants

As this particular training was scientific oriented rather than a general one, the Mediterranean countries invited to attend the training Course were requested to nominate participants with the following profiles:

- (1) scientists who are familiar with the marine plants &/or animals of the region and who may be involved in future implementation of PBBS; or
- (2) technical specialists with knowledge of port environmental management, port safety, or port operations within the host country; or
- (3) environmental managers with responsibility for developing or implementing policy to protect natural marine resources from harmful introduced marine organisms.

A total of 43 participants attended the Training course. The full list of participants is given in **Annex II**.

1.3 Themes selected for the Course

The training course makes use of training materials developed by the GloBallast Partnership (GBP) in association with the National Institute of Water & Atmospheric Research (NIWA) of New Zealand. Its content is based on standardized protocols developed by the Australian Centre for Research on Introduced Marine Pests (CRIMP Protocols) for generalized biological surveys of non indigenous and native species in shipping ports, which have been further reviewed and developed.

The training package is composed of six theoretical modules, three practical sessions and a field visit. The Modules were delivered in the following order:

- Module 1 “Surveys for marine pests”
- Module 2 “Port baseline survey design”
- Module 3 “Survey methods”
- Module 4 “Survey logistics, operations, health and safety”
- Module 5 “Sample management, sorting, preservation and identification”
- Module 6 “Data analysis and reporting”

The three practical sessions included a PBBS design exercise, a diving exercise aimed at collecting samples through pile scraping in a selected shipping port, and a half day work in the laboratory aimed at sorting the samples collected at sea. A field visit to the port of Yenikoy in the Gulf of Izmit was also carried out for those participants who were not entitled to dive.

The work programme of the Training course can be found in **Annex III** to the present report.

1.4 Organizational arrangements

REMPEC and IMO selected the participants and the instructors whereas TUBITAK organized the reproduction of the training material and made available all necessary facilities and equipments for the smooth running of the course.

The day before the official start of the training, some preparatory work was carried out at TUBITAK by organisers, coordinators and instructors of the course. Particular care was given to the organization of the diving exercise and of the practical session in the laboratory. All field and laboratory equipment were checked and organizational matters were arranged.



Fig. 1 & 2 – The selection of the diving site during the preparatory meeting and the visit of TUBITAK's laboratory, where all laboratory equipment needed were reviewed.

The Undersecretariat for Maritime Affairs and the Scientific and Technical Research Council (TUBITAK) of the Republic of Turkey, together with REMPEC and IMO, acted as coordinators of the course, whilst Mr. Murat Korcak, from the Undersecretariat for Maritime Affairs, acted as the Chairperson of the course. Mr. Jose Matheickal, Chief Technical Advisor of the GloBallast Water Management Programme at IMO, acted as backstopping person, adding comments and answering questions as needed.

The course was delivered in English and simultaneous interpretation to French and Arabic was provided.

2. ORGANIZATION OF THE TRAINING

2.1 Opening of the Training

The training course on Port Biological Baseline Surveys was opened at 9.00 hrs on Tuesday 21 October 2008 in the conference room of the Scientific and Technical Research Council of Turkey (TUBITAK).

Mr. Mustafa Tiris, Director of TUBITAK, welcomed the participants and introduced the TUBITAK research Centre. He also presented some of the initiatives taken by Turkey in the field of ballast water management, referring in particular to a specific project carried out by the Centre, which focused on the problem of invasive alien species along the Turkish coast.

Mr. Murat Korcak from the Undersecretariat for Maritime Affairs, as Chairperson of the training course, welcomed the participants and thanked the representatives of TUBITAK, REMPEC, RAC / SPA (Regional Activity Centre for Specially Protected Areas) and IMO for their efforts in organizing the Meeting and for the support provided in carrying out the GloBallast Partnerships project. He highlighted the vulnerability of the Turkish coast to invasive species as a consequence of the intense maritime traffic of the area and informed

the participants on a project related to ballast water management issues that was finalized by Turkey in July 2008. He also informed the Meeting that Turkey had recently started the ratification process of the BWM Convention.

The representative of REMPEC, Ms. Lilia Khodjet El Khil, recalled the objectives of the GloBallast Partnerships project and the role of REMPEC as the Project's Regional Coordinating Organization in the Mediterranean region. She informed the participants that a Regional Task Force to address the issue of ballast water in the Mediterranean was set up during the first Meeting of REMPEC's GloBallast Focal Points in September 2008 in Dubrovnik, Croatia, where it was agreed to develop a Regional Strategy for ships' ballast water management and invasive species in the Mediterranean. She thanked the lecturers for sharing their knowledge and experience with the Mediterranean region and wished the participants a successful training.

Mr. Jose Matheickal recalled the importance of the GloBallast Programme and of the GloBallast Partnerships Project for the ratification and implementation of the BWM Convention. He also expressed his appreciation to the TUBITAK Research Centre, for rendering available all the facilities required for this training course, and to the Undersecretariat for Maritime Affairs of the Republic of Turkey for their efforts and collaborative approach in organizing the activity.

Finally he introduced the two lecturers of the course, Dr. Graeme Inglis and Dr. Oliver Floerl, from NIWA, New Zealand, highlighting their longstanding collaboration with the GloBallast Programme as well as their outstanding experience in the field of port baseline surveys.

2.2 Presentations

Day 1

***Module I ("Surveys for marine pests"), Module II ("Port baseline survey design")
and Module III ("Survey methods")***

Practical session

During the first day of the training, Modules I, II and III were delivered.

Module I ("Surveys for marine pests") was delivered by Dr. Inglis who defined the objectives of PBBS and gave an overview of the different types of surveys that are used in pest management. He also pointed out how these can provide useful information for the management of invasive species.

Module II (“Port baseline survey design”) focused on how PBBS should be designed. Dr. Inglis outlined the general principles for a proper survey design and discussed the CRIMP priorities for site selection in PBBS. He also outlined the general steps which need to be undertaken when designing a field survey, as follows:

- decide the purpose of the survey;
- define the survey area;
- identify the types of sites to be sampled;
- identify how the sites will be chosen;
- determine the type and number of samples needed;
- determine how the data will be analysed and interpreted.

Module III (“Survey methods”) was presented by Dr. Oliver Floerl, who discussed the different survey methods for PBBS. He pointed out the criteria for the selection of appropriate sampling methods, emphasising on the need to ensure a comprehensive coverage of all habitats present in the port. Dr. Floerl described several sampling methods mentioned in the CRIMP protocols and introduced alternative sampling methods which have been developed for environments that are unsuitable for some of the CRIMP protocols. Since most of the sampling is usually performed by divers, some alternative methods for locations where diving is not recommended were described.

On the same day, a presentation on alien species in the Mediterranean was given by Ms. Limor Shoval from the National Institute of Oceanography of Israel. She informed the participants on the number of alien species recorded in the basin between 1900 and 2008 highlighting the Mediterranean as a region at high risk of invasions. She also provided several examples of alien species which have become established in different areas of the Mediterranean Sea.

The afternoon of the first day was dedicated to the practical session on PBBS design. Participants were divided into small groups and asked to plan a proper PBBS in a selected port of the Izmit Bay. Each group was provided with a map of the port and with basic information related to the area. Each Group designed a PBBS and reported their results to the assembly.



Fig. 3 & 4 – Practical session on PBBS design.

Day 2

**Module IV (“Survey logistics, operations, health and safety”),
Module V (“Sample management, sorting, preservation and identification”)
and Module VI (“Data analysis and reporting”)**

The second day of the training course was devoted to the delivery of Modules IV, V and VI.

Module IV (“Survey logistics, operations, health and safety”) on survey logistics, health and safety was presented by Dr. Floerl, who highlighted the importance of both individual responsibilities and collaboration among all survey participants in order to ensure the success of a baseline survey. He highlighted and described the roles and responsibilities shared within the survey team and discussed some of the hazards which may be associated with both field and laboratory work. He also provided the participants with relevant information on how to manage the most common hazards which may be encountered when carrying out PBBS.

Module V (“Sample management, sorting, preservation and identification”) focused on sample and record management in PBBS. Dr. Floerl described in detail all the recommended steps involved in sample management, such as sample labeling, record keeping, sample preservation, sorting and identification of samples, archiving of data and quality assurance. He particularly emphasized on the need of record keeping at each point of the process, in order to keep track of the samples as well as for preventing or tracing errors.

The last Module (“Data analysis and reporting”) of the training on data analysis and reporting was delivered by Dr. Inglis. He emphasized on the advantages of using a standardized, consistent format for reporting the outcomes of PBBS and therefore he described in detail a standard report template which has been prepared by GloBallast to assist countries in developing their reports. He also provided the participants with some statistical tools which can be useful for additional data analysis.

Capt. Cahit Istikbal, from the Turkish Maritime Pilots Association, delivered a presentation on shipping and port safety in Izmit Bay. He provided the participants with relevant features regarding the Gulf of Izmit, describing in particular some of the main port installations distributed in the Gulf (37 in total). He informed the trainees on the significant increase of traffic volume within the Gulf since 2003 and mentioned an average of 40 ships transiting in the area every day.

Finally, a presentation on the Current Status of Alien Organisms in the Turkish Coast was given by Dr. Murat Bilecenoglu, from Adnan Menderes University, Faculty of Arts & Sciences, Turkey. He presented a comprehensive overview of non indigenous species which have reached the Turkish coast through different pathways and from different regions, providing details on their characteristics and likelihood to become invasive. He stated that as of September 2008, 347 species have been recorded as aliens in Turkey.

Representatives from Tunisia and Algeria also delivered brief side-presentation on their respective organizations (APAL- Agence de Protection et d’Aménagement du Littoral, and the port of Skikda, Algeria).

Day 3
Practical sessions

The third day of the training was entirely dedicated to the following practical sessions:

- morning: diving exercise in a selected port for the collection of samples;
- afternoon: sorting of samples in the laboratory.

The sampling session was carried out at Yenikoy terminal in the Gulf of Izmit. Two different sampling methods were utilized for the collection of samples:

- scraping of fouling communities on wharf piles by means of divers; and,
- collection of benthic infaunal organisms through a sediment grab (Shipeck) lowered from the dock of the port.



Fig. 5 & 6 - Collection of samples through pile scraping by means of divers. Samples collected underwater were put in a collection bag attached to the quadrat which was retrieved from the surface.

Divers were provided with a 0.10 m² quadrat attached to a collection bag which was lowered from the surface to three different depths (0.5m, 3m, 1 and 7m) for the collection of samples. The fouling community contained in the quadrats was sampled by scraping it into the collection bag. The same operation was repeated for four different piles.

A vertical video transect of each pile was made from the surface down to 7m depth through an underwater camera.

Participants who were not certified divers attended a short presentation on the port of Yenikoy before joining the diving team on the sampling site. They were informed on the activities which are regularly carried out within the port as well as on its facilities.

All trainees were able to observe the preparatory work on site as well as the collection of samples through the sediment grab. All samples collected on field were labeled properly and kept refrigerated in a sample cooling box. The relevant sheets for record keeping were duly compiled.



Fig. 7 & 8 – Collection of samples through a Schipeck sediment grab.



Fig. 9 & 10 – The samples collected were labeled and kept refrigerated in a sample cooling box until their arrival in the laboratory.

The afternoon was dedicated to the sorting of samples in the laboratory of TUBITAK. A briefing session was organised prior to the sorting exercise so as to guide the participants on how to proceed and what to look for. Samples collected at sea during the morning practical session were then sorted in broad taxonomic groups which were extracted and placed into separate containers.

In order to ensure proper working conditions, the laboratory was specifically arranged and the participants were divided into small groups of 4-5 people each, with a marine biologist in each group.



Fig.11 & 12 – Sorting of samples in the laboratory.

Day 4

Course summary and planning future activities

In the morning of the last day of the training, participants were asked to report back on the practical sessions of Day 3 and to provide comments and suggestions on the relevant activities.

The lecturers summarized the general concepts provided by the training and stressed that the main tools for developing a PBBS were delivered. Dr. Inglis pointed out the general constraints for carrying out a port baseline survey (e.g. political will, availability of resources, capability e.g. taxonomic knowledge and sustainability) and provided the participants with some indications on how these can be overcome.

The participants recognized the necessity of carrying out PBBS surveys as a monitoring routine operation and, to this end, it was agreed that raising awareness of the problem of invasive species may play a fundamental role. Some of the participants also raised the issue of financing the PBBS.

Mr. Jose Matheickal recalled the importance of conducting port baseline surveys in the field of ballast water management and highlighted the need of ensuring a follow up at national level to this training activity. He therefore encouraged the participants to initiate the process for implementing PBBS in their own countries and to provide specific national training on this issue as appropriate. He also provided information on how to reduce the costs related to a PBBS study.

He also called upon the participants to provide recommendations for future regional initiatives to be undertaken. Some participants recalled the importance of ensuring cooperation at regional level on ballast water management issues and suggested to make available a website for the exchange of data on invasive species. The aim would be to create a country profile database, which is also one of the objectives of the GloBallast Partnerships project, where data on both native and non indigenous species would be available for each country, together with the contact details of the relevant scientists.

Finally, Mr. Matheickal pointed out the added value of having this training translated into both French and Arabic languages and called for the support of the countries in this regard. Representatives from Lybia and Egypt agreed to share the task of translating the course into Arabic whereas the Tunisian participants volunteered to take care of the translation into French.

In order to determine the usefulness of the course and the possible ways to improve it, participants were provided with a Course Evaluation Form which is reproduced in **Annex IV**. Participants were asked to comment on several aspects of the training, such as the content of the training modules, the practical sessions and some logistic arrangements. The general feedback was very positive.

The training course was concluded at 11H30 on 24 October 2008. The representatives of IMO and REMPEC thanked the Undersecretariat for Maritime Affairs and TUBITAK of the Republic of Turkey for their support and valuable collaboration which ensured the best conditions of work for the Training. They also expressed their great appreciation to the lecturers for the extremely professional work carried out throughout the course.

All participants were provided with a Certificate of attendance for the present training course. A copy of the Certificate is given in **Annex V**.

The participants in the Training Course on Port Biological Baseline Surveys



ANNEX(E) I

LIST OF PARTICIPANTS / LISTE DES PARTICIPANTS

PARTICIPANTS SPONSORED BY REMPEC / PARTICIPANTS PRIS EN CHARGE PAR LE REMPEC

ALBANIA / ALBANIE

Mr. Arben MALOKU

Specialist of Maritime Transport Policies
Ministry of Public Works, Transport and Telecommunication
Square Skënderbej
Tirana

Tel no: +355 (4) 25 70 28
Mobile: +355 69 20 93 819
Fax no: +355 (4) 25 70 28
E-mail: beni2000al@yahoo.com

ALGERIA/ ALGERIE

M. Mohamed NAIM

Officier de port après de l'Entreprise Portuaire de Skikda
Autorité Portuaire de Skikda
3 Rue Antoine Allemand Skikda
Skikda 21000

Tel no: +213 38 75 13 39/ 38 76 12 47
Mobile: +213 661 33 12 12
Fax no: +213 38 75 29 70/ 38 76 43 99
E-mail: naim@skikda-port.com

M. Abdelouaheb NASRALLAH

Responsable Management Qualité, Santé, Sécurité et Environnement auprès de
l'Entreprise Portuaire de Skikda
BP 65 Ilot des chèvres
Skikda 21000

Tel no: +213 38 75 68 50
Mobile: +213 77 17 23 609
Fax no: +213 38 75 20 15
E-mail: nasrallah@skikda-port.com

CROATIA/ CROATIE

Ms. Ivana MAROVIĆ

Expert Adviser
Ministry of the Sea, Transport and Infrastructure
Harbour Master Office Split
Obala Lazareta 1
21000 Split

Tel no: +385 (1) 345 656
Fax no: +385 (1) 345 656
E-mail: ivana.marovic@pomorstvo.hr

Ms. Živana NINČEVIĆ GLADAN

Research Assistant
Institute of Oceanography and Fisheries
Šetlište I. Meštrovića 63
21000 Split

Tel no: +385 (21) 408 015
Mobile: +385 (091) 710 1729
Fax no: +385 (21) 358 650
E-mail: nincevic@izor.hr

EGYPT/ ÉGYPTE

Mr. Tarek SHAHIN

Head of the Central Administration of Marine Environment Affairs
Maritime Transport Sector
4 Ptolemy Street
Alexandria 21514

Tel no: +20 (3) 486 96 54
Mobile: +20 (010) 171 20 58
Fax no: +20 (3) 486 96 54
E-mail: tarekshahin1959@yahoo.com

Mr. Kossay Mahmoud EL DESOKY KORUEISH

Director of Special Assignment Division
Egyptian Environment Affairs Agency (EEAA)
30 Misr-Helwan El Zyrae Road
Maadi, Cairo

Tel no: +20 (22) 525 64 91 / 92
Mobile: +20 (012) 39 37 684
Fax no: +20 (22) 525 64 94
E-mail: kkoreish@yahoo.com

ISRAEL/ ISRAËL

Mrs. Yael ZELDMAN-HAVIV

Scientific coordinator
Marine and Coastal Environment Division
Ministry of Environment Protection
P.O. B 811
Haifa 31007

Tel no: +972 4 8633 511
Mobile: +972 50 6233 211
Fax no: +972 4 8633 520
E-mail: yaelz@sviva.gov.il

Ms. Limor SHOVAL

Senior Technician
National Institute of Oceanography
Israel Oceanographic & Limnological Research
Tel Shikmona, P.O.B 8030
Haifa 31080

Tel no: +972 4 856 52 72
Fax no: +972 4 851 19 11
E-mail: limor@ocean.org.il

JORDAN/ JORDANIE

Mr. Omar ALDABBAS

Head of International Conventions & Maritime Organizations Division
Jordan Maritime Authority
Rasheed Street
P.O. Box 171
Aqaba 77110

Tel no: +962 3 201 5858 Ext. 120
Mobile: +962 79 906 74 34
Fax no: +962 3 203 1553
E-mail: omaraldabas@yahoo.com
E-mail: jma_seafarers@nic.net.jo

Mr. Abdel Rahman DARWISH

Port State Control Officer
Jordan Maritime Authority
Rasheed Street
P.O. Box 171
Aqaba 77110

Tel no: +962 3 201 5858 Ext. 219
Mobile: +962 79 727 47 87
Fax no: +962 3 203 1553
E-mail: abed_dr2006@yahoo.com

LEBANON/ LIBAN

Mr. Mohammed EL MAWLA

Port Officer
Ministry of Transport
Port of Beirut
Quarantine Street
Beirut

Tel no: +961 (9) 545 434
Mobile: +961 (3) 300 671
Fax no: +218 (1) 584 447
E-mail: toniassaf@hotmail.com

LIBYA/ LIBYE

Eng. Mohamed A. ELGAMEZI

Environment Emergency Office Manager
Environment General Authority
P.O. Box 83618
Al Ghiran
Tripoli

Tel no: +218 (21) 487 37 61
Mobile: +218 (92) 518 4180
Fax no: +218 (21) 487 21 60
E-mail: etleha@yahoo.com

Mr. Abduladim BALLUG

Environment Emergency Office Advisor
Environment General Authority
P.O. Box 83618
S.guma – Ain Zarah -Tripoli

Tel no: +218 (21) 463 08 70
Mobile: +218 (91) 212 42 05
Fax no: +218 (21) 483 08 70
E-mail: aaafmm@yahoo.com

MONTENEGRO/ MONTENEGRO

Mr. Goran JURISIĆ

Maritime Safety Inspector
Harbour Master's Office
Ministry of Transport, Maritime Affairs and Telecommunications
Obala 13 Jula 18
85000-Bar

Tel no: +382 (85) 312733
Mobile: +382 (0) 69 035 423
Fax no: +382 (85) 302060
E-mail: mingo@cq.yu

MONTENEGRO/ MONTENEGRO (cont./ suite)

Mrs. Dragana DRAKULOVIĆ

Researcher
Institute of Marine Biology
Dobrota BB
85330 Kotor

Tel no: +382 326 840 76
Mobile: +382 674 593 30
Fax no: +382 323 345 70
E-mail: ddragana@cq.yu

MOROCCO/ MAROC

M. Lahoucine MEKAOUI

Chef de la division sûreté sécurité et environnement
Agence Nationale des ports
25 bis Rue d'Agadir Cité Lyautey
Casablanca

Tel no: +212 (22) 78 60 70
Fax no: +212 (22) 78 60 63
E-mail: MEKAOUI@anp.org.ma

M. Khalid SAMIR

Commandant du Port
Tangier Med Port Authority (TMSA)
23, Rue Carnot, Immeuble Attento 3^{eme} étage 90000
Tanger

Tel no: +212 39 33 70 72 / 61 25 48 82
Fax no: +212 39 33 70 90 / 91
E-mail: k.samir@tmsa.ma

SPAIN/ ESPAGNE

Ms. Mar DIEZ

Technical Advisor, Researcher
Centre for Harbours and Coastal Studies (CEPYC-CEDEX)
Antonio Lopez, 81
Madrid 28026

Tel no: +34 91 335 7664
Fax no: +34 91 335 7622
E-mail: mar.diez@cedex.es

SYRIA/ SYRIE

Mr. Shaka AL SOLEMAN

Governmental Coordinator
Ministry of Local Administration and Environment Affairs
General Commission for Environmental Affairs
Kafer Souseh Autostrad
P.O. Box 3773
Damascus

Tel no: +963 (11) 2140757
Mobile: +963 (933) 583 314
Fax no: +963 (11) 21 40 761
E-mail: shaka@mail.sy
shakaalsoleman@yahoo.com

Mr. Manjood SHAHADEE

Chemical Engineer in Marine Anti-Pollution Department
General Directorate of Ports
Algazair Street P.O. Box 505
Lattakia

Tel no: +963 (41) 473 876
Mobile: +963 (991) 727 320
Fax no: +963 (41) 475 805
E-mail: manjood_mhkm@yahoo.com

TUNISIA/ TUNISIE

M. Ali GAMOUN

Ingénieur Travaux
Agence de protection et d'aménagement du littoral (A.P.A.L)
2, rue Mohamed Rachid Ridha
Le Belvédère
Tunis 1002

Tel no: +216 (71) 840 177
Mobile: +216 (97) 641 267
Fax no: +216 (71) 848 660
E-mail: boc@apal.nat.tun
Gamouna@gmail.com

M. Rachid FEFEL

Chef de la Division Sécurité et Protection de l'Environnement
Office de la Marine Marchande et des Ports
OMMP - Direction Générale
2060 La Goulette

Tel no: +216 (71) 735 300
Fax no: +216 (71) 735 812
E-mail: r.fefel@ommp.nat.tn

TURKEY/ TURQUIE

Mr. Ömer TIKTIK

Head of Department
Undersecretariat for Maritime Affairs
Denizcilik Müsteşarlığı
GMK Bulvarı No.128 Maltepe
Ankara 06500

Tel no: +90 (312) 232 38 50 / 25 33
Mobile: +90 505 788 39 78
Fax no: +90 (312) 231 33 06
E-mail: omer.tiktik@uma.gov.tr

Mr. Murat KORÇAK

Engineer
Undersecretariat for Maritime Affairs
Denizcilik Müsteşarlığı
GMK Bulvarı No.128 Maltepe
Ankara 06500

Tel no: +90 (312) 232 38 50 / 2174
Mobile: +90 532 524 33 71
Fax no: +90 (312) 231 33 06
E-mail: murat.korcak@denizcilik.gov.tr

**PARTICIPANTS SPONSORED BY THE TURKISH AUTHORITIES/ PARTICIPANTS PRIS
EN CHARGE PAR LES AUTORITES TURQUES**

**UNDERSECRETARIAT FOR MARITIME AFFAIRS/ SOUS-SECRETARIAT POUR LES
AFFAIRS MARITIMES (U.M.A.)**

Mr. Güner DÜVEN

Izmit Harbour Master
Izmit Harbour
Undersecretariat for Maritime Affairs
General Directorate for Maritime Transport
GMK Bulvarı No.128 - Kat 6
06570 Maltepe
Ankara

E-mail: gunerduven@yahoo.com

Mr. Turgay BUYURAN

Assistant Maritime Expert
Undersecretariat for Maritime Affairs
General Directorate for Maritime Transport
GMK Bulvarı No.128 - Kat 6
06570 Maltepe
Ankara

Tel no: + 90 312 232 3850 / 2165
Fax no: + 90 312 231 3306
E-mail: turgay.buyuran@uma.gov.tr

Mr. Haydar Ufuk KALE

Engineer
Undersecretariat for Maritime Affairs

Tel no: + 90 312 232 38 50 / 2529
Fax no: + 90 312 231 33 06
E-mail: ufuk.kale@uma.gov.tr

Mr. Ferhat BALCI

International Relations Department
Undersecretariat for Maritime Affairs

Tel no: + 90 312 232 38 50 / 2529
E-mail: ferhat.balci@denizcilik.gov.tr

Mr. Mutlu METIN

Port State Officer
District Directorate of Istanbul
Undersecretariat for Maritime Affairs

Mobile no: + 90 505 858 0289
E-mail: mutlumetlin09@hotmail.com

TUBITAK MARMARA RESEARCH CENTER (MRC)/
CENTRE DE RECHERCHES DE TUBITAK MARMARA

Mr. Mustafa TIRIS

Director of Chemistry and Environment Institute

Tel no: +90 0262 677 2900
E-mail: mustafa.tiris@mam.gov.tr

Ms. Özen ARLI

Researcher
Chemistry and Environment Institute

E-mail: ozerarli@mam.gov.tr

Ms. Asli Súha DÖnertas

Researcher
Chemistry and Environment Institute

Tel no: +90 0262 677 2969
E-mail: asli.donertas@mam.gov.tr

Mr. Fatih Hüseyinođlu

Researcher
Materials Institute

Tel no: +90 0262 677 3170
E-mail: fatih.huseyinoglu@mam.gov.tr

Mrs. Tildan TÚFEKÇI

Researcher
Chemistry and Environment Institute

Tel no: +90 0262 677 2943
E-mail: vildan.tufekci@mam.gov.tr

Mr. Mustafa MANTIKCI

Researcher
Chemistry and Environment Institute

Tel no: +90 0262 677 2983
E-mail: mustafa.mantikci@mam.gov.tr

Mr. Mustafa Yiđit KONYA

Technician
Chemistry and Environment Institute

Tel no: +90 0262 677 2991
E-mail: yigit.konya@mam.gov.tr

ISTANBUL UNIVERSITY MARINE SCIENCE AN MANAGEMENT INSTITUTE

Mr. Mahmut Selim ERSAN

Tel no: +90 505 64 92348
E-mail: [mselim@istanbul.edu.tr](mailto:mahmutselim@istanbul.edu.tr)

Mr. Umut TURAL

Tel no: + 0532 232 3768
E-mail: umut.tural@gmail.com

TURKISH MARINE ENVIRONMENT PROTECTION ASSOCIATION (TURMEPA)

Ms. Isil ONAN

Project Coordinator
DenizTemiz Dernegi/TURMEPA
Nakkastepe Aziz Bey Sok. No:26
Kuzguncuk-Istanbul

Tel no: +90 (216) 310 93 01
Mobile: +90 (532) 682 2933
Fax no: +90 (216) 343 21 77
E-mail: isilo@koc.com.tr
isilo@turmepe.org.tr

BACKSTOPPING/ APPUI TECHNIQUE

**INTERNATIONAL MARITIME ORGANIZATION (IMO) - GLOBALLAST/ ORGANISATION
MARITIME INTERNATIONALE (OMI) - GLOBALLAST**

Dr. Jose MATHEICKAL

Chief Technical Advisor
Global Ballast Water Management Programme, Marine Environment Division
International Maritime Organization
4 Albert Embankment
London SE1 7SR
UNITED KINGDOM

Tel: + 44 (207) 587 3279
Fax: + 44 (207) 587 3210
Mobile: + 44 7876 688 329
E-mail: JMATHEIC@imo.org

**HOST COUNTRY (TURKEY) AUTHORITIES/
AUTORITES DU PAYS D'ACCUEIL (TURQUIE)**

**UNDERSECRETARIAT FOR MARTIME AFFAIRS (U.M.A.)/ SOUS-SECRETARIAT POUR
LES AFFAIRES MARITIMES (U.M.A.)**

Mr. Ömer TIKTIK

Head of Department
Undersecretariat for Maritime Affairs
Denizcilik Müsteşarlığı
GMK Bulvarı No.128 Maltepe
Ankara 06500

Tel no: +90 (312) 232 38 50 / 25 33
Mobile: +90 505 788 39 78
Fax no: +90 (312) 231 33 06
E-mail: omer.tiktik@uma.gov.tr

Mr. Murat KORÇAK

Engineer
Undersecretariat for Maritime Affairs
Denizcilik Müsteşarlığı
GMK Bulvarı No.128 Maltepe
Ankara 06500

Tel no: +90 (312) 232 38 50 / 2174
Mobile: +90 532 524 33 71
Fax no: +90 (312) 231 33 06
E-mail: murat.korcak@denizcilik.gov.tr

**TUBITAK MARMARA RESEARCH CENTRE (MRC)/ CENTRE DE RECHERCHES DE
TUBITAK MARMARA**

Dr. Arzu OLGUN

Senior Researcher
Tubitak Marmara Research Centre
TÜBİTAK Başkanlık
TÜBİTAK Tunus Caddesi No: 80
06100 Kavaklıdere / Ankara
TURKEY

Tel no: +90 262 677 2945
Fax no: +90 262 641 2309
E-mail: Arzu.Olgun@mam.gov.tr

Mr. Fatih KARAKOÇ

Manager – Administration & Social Affairs Department
Tubitak Marmara Research Centre
TÜBİTAK Başkanlık
TÜBİTAK Tunus Caddesi No: 80
06100 Kavaklıdere / Ankara
TURKEY

Tel no: +90 (262) 677 22 00
Fax no: +90 (262) 677 22 01-02
E-mail: Fatih.Karakoc@mam.gov.tr

INTERPRETERS/ INTERPRETES

Ms. Simona MARCHETTI

Interpreter – Co-ordinator

Mr. Bachir GARBOUJ

Interpreter

Ms. Hanem ATTIA

Interpreter

Mr. Faycal SOUISSI

Interpreter

International Translation Agency Ltd.
80/1 Tigné Street
Sliema SLM 04
MALTA

Tel no: +356 21 322 404
+356 21 333 642
Fax no: +356 21 319 008
E-mail: corporate@itamalta.com
info@itamalta.com

SECRETARIAT / SECRETARIAT

**REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THE
MEDITERRANEAN SEA (REMPEC)/
CENTRE REGIONAL MÉDITERRANÉEN POUR L'INTERVENTION D'URGENCE CONTRE
LA POLLUTION MARINE ACCIDENTELLE (REMPEC)**

Dr. Lilia KHODJET EL KHIL

Programme Officer (Marine Environment Protection)

E-mail: lilia.khodjet@rempec.org

Ms. Cristina FARCHI

Programme Officer

E-mail: cfarchi@rempec.org

REMPEC
Maritime House
Lascaris Wharf
Valletta VLT 1921

Tel no: +356 21 33 72 96/7/8
Fax no: +356 21 33 99 51
E-mail : rempec@rempec.org
Website www.rempec.org

ANNEX(E) II

LIST OF LECTURERS / LISTE DE CONFÉRENCIERS

Dr. Graeme INGLIS

Principal Scientist - Biosecurity
National Institute of Water and Atmospheric Research (NIWA)
Christchurch
P.O. Box 8602
NEW ZEALAND

Tel: +64 33 43 80 56
Fax: +64 (021) 656 773
Mobile: +64 (3) 348 55 48
E-mail: g.inglis@niwa.co.nz

Dr. Oliver FLOERL

Aquatic Biodiversity and Biosecurity
National Institute of Water and Atmospheric Research (NIWA)
Christchurch
P.O. Box 8602
NEW ZEALAND

Tel: +64 (3) 343 80 56
Mobile: +64 (3) 348 55 48
E-mail: o.floerl@niwa.co.nz

Dr. Murat BILECENOGLU

Assoc. Prof.
Adnan Menderes University
Department of Biology
TURKEY

Tel: +90 256 212 84 98 / 2219 (Ext.)
Fax: +90 256 213 53 79
E-mail: mbilecenoglu@yahoo.com

Capt. Cahit ISTIKBAL

Turkish Maritime Pilots Association
Türk Kılavuz Kaptanlar Derneği
Sıra Dükkanlar No:85 Tophane
İSTANBUL 80040
TURKEY

Email: cahit@istikbal.org
Website: www.turkishpilots.org.tr

Ms. Limor SHOVAL

Senior Technician

National Institute of Oceanography

Israel Oceanographic & Limnological Research

Tel Shikmona, P.O.B 8030

Haifa 31080

ISRAEL

Tel no: +972 4 856 52 72

Fax no: +972 4 851 19 11

E-mail: limor@ocean.org.il

ANNEX III

PROGRAMME

Tuesday, 21 October 2008	
Time	
08.30 – 09.00	Registration
09.00 – 09.15	Welcome & Opening remarks
09.15 – 09.30	Introduction to the Course and Lecturers
09.30 – 10.30	Module 1. Types of Marine Pest Surveys
10.30 – 11.00	<i>Coffee break</i>
11.00 – 11.30	Alien Species in the Mediterranean – Ms. Limor Shoval
11.30 – 12.30	Module 2. PBBS Design
12.30 – 13.30	<i>Lunch break</i>
13.30 – 14.30	Module 3. PBBS Survey Methods
14.30 – 15.00	Practical exercise – PBBS Design
15.00 – 15.30	<i>Coffee break</i>
15.30 – 17.00	Practical exercise – PBBS Design (continued)

Wednesday, 22 October 2008	
Time	
08.30 – 09.30	Report Back on Day 1 – Practical exercise
09.30 – 10.30	Module 4. Survey logistics
10.30 – 11.00	<i>Coffee break</i>
11.00 – 12.30	Shipping and Port Safety – Local Port representative
12.30 – 13.30	<i>Lunch break</i>
13.30 – 14.30	Module 5. Sample & Record Management
14.30 – 15.30	Current Status of Alien Organisms in the Turkish Coast – Dr. Murat Bilecenoglu, Adnan Menderes University , Faculty of Arts & Sciences, Turkey
15.30 – 16.00	<i>Coffee break</i>
16.00 – 17.00	Module 6. Data Analysis and Reporting
17.00 – 17.30	Preparation for Day 3 (Excursion)

Thursday, 23 October 2008

Time	
08.30	Assembly at TUBITAK
9.00 – 12.30	Tour of Port / Sampling Exercise
13.00 – 14.00	<i>Lunch break</i>
14.00 – 17.30	Practical exercise – Sample & Record Management

Friday, 24 October 2008

Time	
09.00 – 09.30	Report back on Day 3 exercise
09.30 – 10.30	Course Summary
10.30 – 11.00	<i>Coffee break</i>
11.00 – 12.00	Planning Future Activities
12.00 – 12.30	Course Review & Evaluation
12.30 – 13.00	Closing Ceremony and Award of Certificates
13.00 – 14.00	<i>Lunch break</i>

ANNEX IV

COURSE EVALUATION

Thank you for your participation in the Training Course on Port Biological Baseline Surveys. To help us determine how useful the training course has been for you and to help us improve the course, please take a few minutes to complete the evaluation form.

Using the scales below, please rate the following components of the course:

1 = Poor 2 = Fair 3 = Average 4 = Very Good 5 = Excellent

(1) The content of the Lecture Modules	1	2	3	4	5
(2) The quality of presentation by the lecturers	1	2	3	4	5
(3) The presentations by guest lectures	1	2	3	4	5
(4) Practical exercise 1 (PBBS survey design)	1	2	3	4	5
(5) The field trip	1	2	3	4	5
(6) Practical exercise 2 (Laboratory procedures)	1	2	3	4	5
(7) The Course Notes and training resources	1	2	3	4	5
(8) The classroom facilities	1	2	3	4	5
(9) The accommodation	1	2	3	4	5
(10) The food	1	2	3	4	5

Please complete the following statements.

A good thing I learnt on this course was.....

Next time you run the course you should include.....

Any other comments?

ANNEX V

CERTIFICATE



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

CERTIFICATE

No.

This is to certify that

_____ has attended the

TRAINING COURSE ON PORT BIOLOGICAL BASELINE SURVEYS

**Gebze (Istanbul), Turkey
21 – 24 October 2008**

organized by

REMPEC

within the framework of the

MEDITERRANEAN ACTION PLAN

and of the

**EUROPEAN UNION FUNDED MEDA REGIONAL PROJECT
SAFEMED (MED 2005/109-573)**

and of the

GEF / UNDP/ IMO GLOBALLAST PARTNERSHIPS PROJECT

in co-operation with the



UNDERSECRETARIAT FOR MARITIME AFFAIRS

and the



SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL (TÜBİTAK)

REPUBLIC OF TURKEY

Frédéric Hébert
Director
REMPEC

Dr. Jose Matheickal
Chief Technical Advisor
Global Ballast Water Management Programme
Marine Environment Division - IMO