



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





Port reception facilities for collecting ship-generated garbage, bilge waters and oily wastes (MED.B7.4100.97.0415.8)



### PROJECT REFERENCE

MED.B7.4100.97.0415.8

### **PROJECT TITLE**

Port reception facilities for collecting ship-generated garbage, bilge waters and oily wastes

FINAL TECHNICAL REPORT – YEARS 1, 2 & 3				
Period of activities covered by this report				
From	01/01/2002	to	31/12/2004	

### COMMENCEMENT DATE OF THE PROJECT

01/01/2002

### **COMPLETION DATE OF THE PROJECT**

31/12/2004

### **AREAS OF ACTIVITY**

Technical assistance

### TABLE OF CONTENTS

Project synopsis	3
Project objective	4
General overview of the implementation process of the Project	7
Detailed description of the implementation process of the Project	8
Outputs of the Project	14
Further application of the Project results	17
Deliverables and dissemination of information	18
Conclusion	20

### 1. PROJECT SYNOPSIS

BENEFICIARY		
Organisation	International Maritime Organisation (IMO) on behalf of the	
	Regional Marine Pollution Emergency Response Centre for the	
	Mediterranean Sea (REMPEC)	
Full address	Manoel Island - Gzira GZR 03	
Country	Malta	
Tel	+356 21 33 72 96/7/8	
Fax	+356 21 33 99 51	
E-mail	rempec@rempec.org	

PROJECT CO-ORDINATOR	Mr. Jonathan PACE (Programme Officer, Prevention)	
Telephone	+356 21 33 72 96/7/8	
Fax	+356 21 33 99 51	
E-mail	jpace@rempec.org	

PROJECT MONITOR	EPU-NTUA Consortium of Greece		
Direct telephone	+ 32 2 513 6113		
Direct fax	+ 32 2 513 0639		
E-mail	med.monitoring@skynet.be		
	- At REMPEC offices, 14 November 2002;		
Project monitoring meetings	- At REMPEC offices, 23 September 2003;		
	- At REMPEC offices, 30 November 2004.		

PROJECT REFERENCE	MED.B7.4100.97.0415.8
PROJECT TITLE	Port reception facilities for collecting ship-generated garbage, bilge waters and oily wastes
Countries where the project was implemented	Algeria; Cyprus; Egypt; Israel; Lebanon; Malta; Morocco; Tunisia; Turkey and Syria

<b>DURATION OF THE PROJECT</b> (As mentioned in the addendum n° 1 to the Grant Agreement)	3 (three) years
(As mentioned in the original Grant Agreement and in the initial project proposal).	24 months
COMMENCEMENT DATE OF THE PROJECT	01/01/2002
COMPLETION DATE OF THE PROJECT	31/12/2004

### 2 PROJECT OBJECTIVE

### 2.1 General Background

## 2.1.1 Implementing the International Convention for the Prevention of Pollution from Ships 1973/78

The lack of implementation of the International Convention for the Prevention of Pollution from Ships 1973/78 (MARPOL 73/78), which deals with both accidental and operational marine pollution, is one of the main concerns with respect to prevention of pollution from ships in the Mediterranean Sea. Indeed, even though accidental marine pollution still attracts major public attention, operational pollution by illegal discharges into the sea is the main source of pollution of the marine environment by ships. This is particularly true for the Mediterranean Sea, a particularly sensitive area in terms of chronic pollution due to its geographical, oceanographic and ecological specificities.

In addition to oil pollution<sup>1</sup>, the MARPOL 73/78 Convention also addresses pollution by chemicals<sup>2</sup>, harmful substances carried in packaged form<sup>3</sup>, sewage<sup>4</sup>, garbage<sup>5</sup> and air pollution from ships<sup>6</sup>. According to the provisions of Annex I (Oil) and Annex V (Garbage) to MARPOL 73/78, the Mediterranean Sea is designated as a 'special area', where more stringent measures for the prevention of operational pollution are applied. Ships are thus not allowed to discharge oil or garbage into the Mediterranean Sea, and thus:

- ships are requested to retain on board and treat such wastes, and
- the wastes and residues have to be discharged into adequate reception facilities provided by the Coastal States in their ports and terminals.

While significant improvement has been reached in ship design and equipment which permits retention on board of residues, the requirements concerning the transfer of residues to reception facilities on shore are not fulfilled due to the lack of adequate reception facilities in certain ports and terminals of the Mediterranean.

It is recognized that the establishment of adequate port reception facilities has to be given due consideration by competent national administrations, particularly when considering the development of new ports in the Mediterranean region. Indeed, the development of national legislation in the field of prosecution for illegal discharges can only be considered justified if possibility is given to the masters to use adequate port reception facilities.

Despite the fact that Annex I and Annex V to MARPOL 73/78 entered into force in 1983 and in 1988 respectively, Mediterranean coasts are still suffering from a serious lack of adequate port reception facilities for collecting ship-generated wastes. The solution to this problem calls for close co-operation amongst all Mediterranean coastal States and for joint action.

<sup>&</sup>lt;sup>1</sup> Regulations for the Prevention of Pollution by Oil - Annex I.

<sup>&</sup>lt;sup>2</sup> Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk - Annex II.

<sup>&</sup>lt;sup>3</sup> Regulation for the Prevention of Pollution by harmful Substances Carried by Sea in Packaged Form-Annex III.

<sup>&</sup>lt;sup>4</sup> Regulation for the Prevention of Pollution by Sewage from ships - Annex IV.

<sup>&</sup>lt;sup>5</sup> Regulations for the Prevention of Pollution by Garbage from Ships - Annex V.

<sup>&</sup>lt;sup>6</sup> Regulations for the prevention of Air Pollution from Ships - Annex VI, not yet into force.

### 2.1.2 Regional Cooperation Through the Euro-Mediterranean Partnership

The Euro-Mediterranean Partnership inaugurated at the 1995 Barcelona Conference established a policy with ambitious and long-term objectives. The Barcelona process includes three main pillars: Political and security partnership; Economic and financial partnership; and Partnership in social, cultural and human affairs. Within the economic and financial partnership, **regional economic co-operation** was developed, involving the 27 partners (15 EU Member States and 12 Mediterranean partners) and including, among six priority fields, transport. A first series of maritime transport projects, financed by the MEDA Fund, was launched in 1997. A technical assistance project on "Port reception facilities for collecting ship-generated garbage, bilge waters and oily wastes" was one of the projects identified for support. To this end, a contract, which took the form of a "Grant Agreement with an International Organisation" was prepared and signed between the European Community (EC) and the International Maritime Organization (IMO) on behalf of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), on the 4 December 2001.

The Project addressed ten MEDA beneficiary countries which are also Parties to the 1976/1995 Barcelona Convention<sup>7</sup>: Algeria; Cyprus; Egypt; Israel; Lebanon; Malta; Morocco; Tunisia; Turkey and Syria, and its implementation started on the 1<sup>st</sup> of January 2002.

### 2.2 Description of the methodological solution

#### 2.2.1 Technical

The methodological approach that was developed to address the lack of adequate port reception facilities in the beneficiary countries was first to identify the **existing situation and needs** regarding port reception facilities in the relevant ports and oil terminals of the Mediterranean countries covered by the Project (Activities A&C: identification of required capabilities for collection and treatment of relevant types of solid and liquid wastes).

On the basis of the results of these two first activities, a study proposing **optimum solutions** for collecting treating and disposing ship-generated wastes was to be prepared (Activity B: preparation of a study concerning optimum solutions for collecting, treatment and disposal of relevant types of ship-generated solid and liquid wastes). The Study had to take into consideration specific features of each particular country, and included proposals regarding the type and size of required port reception facilities and wastes treatment plants, based on the best available technology.

Finally, **standard designs** were to be produced for port reception facilities and waste treatment plants (Activity D: preparation of standard designs for (a) oily wastes reception, treatment, storage and dewatering facilities and (b) garbage collection, treatment and disposal facilities), that could be made available free of charge to all Mediterranean Coastal States involved, for implementation in their ports.

Concluding the Project, a **Regional Seminar** was planned in order to discuss the results of the above mentioned activities and to recommend a course of action for future implementation (Activity E).

<sup>&</sup>lt;sup>7</sup> "Convention for the Protection of the Mediterranean Sea Against Pollution" adopted on 16 February 1976, as amended on 10 June 1995 and renamed the "Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean".

#### 2.2.2. Methodological

# 2.2.2.1 Involvement of Mediterranean EU Member States and the Steering Committee of the Project

The Project also involved four Mediterranean EU Members States (France, Greece, Italy and Spain) as EU partners from whom full support to the Project was assumed in view of their experience in the field. This support was specifically provided through the presence of EU partner's representatives in the meetings of the Project's Steering Committee, which was set up for the follow-up of the execution of the Project, especially in providing guidance and ensuring compatibility of the results with European and international legislation as well as coordination between the activities carried out under the Project and the relevant activities undertaken in the Mediterranean EU members States, with special reference to the implementation of the Port Waste Reception Facilities Directive 2000/59/EC. Three Meetings of the Steering Committee took place within the implementation period of the Project (one per year).

### 2.2.2.2 Involvement of the beneficiary countries

The ten beneficiary countries were constantly kept informed on and involved in the implementation of the Project. To this end, circular letters were regularly issued to the REMPEC Focal Points of the beneficiary countries and of the Mediterranean EU Member States (France, Greece, Italy and Spain), and to other relevant competent authorities. Other important stakeholders such as IMO and UNEP's Mediterranean Action Plan (MAP) were also kept informed on the implementation of the activities of the Project. In addition, in order to ensure a smooth execution of Activities A&C, which involved fact-finding missions in the countries, REMPEC provided the relevant authorities with all necessary information on the appointed consultants and scope/planning of the needs assessment missions. The countries were requested to plan, jointly with the Consultant, the visits in the ports as well as meetings with relevant national competent authorities. They were also requested to designate an officer to liase and assist the Consultant during the mission. This approach proved to be efficient, since all the missions were successfully carried out.

Finally, the ten beneficiary countries were invited to attend, as observers, the meetings of the Steering Committee. The countries had to cover the expenses of their participation. An observer from Malta participated in the first Meeting, whilst observers from Algeria, Malta and Tunisia (2 representatives from the latter) attended the second Meeting of the Steering Committee. Observers from Algeria, Cyprus, Egypt, Malta and Tunisia attended the third Meeting of the Steering Committee of the Project.

#### 2.3 Expected objectives and results

The primary objectives and expected results of the Project were the following:

- to identify the existing situation and needs regarding port reception facilities in the beneficiary countries;
- to propose optimum solutions for collecting ship-generated wastes in the Project's beneficiary countries and to provide the said countries with the appropriate necessary technical solutions to set up port reception facilities; and
- to provide a basis for the implementation of the results of the Project on a regional, subregional or national level.

# 3 GENERAL OVERVIEW OF THE IMPLEMENTATION PROCESS OF THE PROJECT

## 3.1 Preparatory activities: recruitment of technical assistant and dissemination of information on the Project

As soon as the contract was signed, REMPEC started procedures for the recruitment of a technical assistant to the Project. In February 2002, REMPEC appointed Ms. Lilia Khodjet El Khil, a French PhD graduate, as technical assistant. During March and April 2002, contacts were established with the European Commission's Directorate General for Transport and Energy and with the Directorate General EuropeAid Co-operation Office. Circular letters were sent to the REMPEC Focal Points of the beneficiary countries, and of the EU Mediterranean Member States (Spain, France, Italy and Greece), IMO, UNEP's Mediterranean Action Plan (MAP) and other relevant competent authorities, aiming at describing the Project and providing information on its execution.

### 3.2 Extension of the duration of the Project

In order to ensure the smooth implementation of the Project, the first Meeting of the Project's Steering Committee (06-07 May 2002) recommended to extend its duration from two to three years. Following the European Commission's favourable consideration to REMPEC's request, in October 2002, the Centre prepared a revised three-year budget of the operation and forwarded a first draft. In April 2003, the proposed revised budget was agreed to by the EC and an addendum to the contract, together with its revised workplan and three-year budget, was signed by the EC and IMO (on behalf of REMPEC).

#### 3.3 Implementation process of Activities A and C

The implementation of the first two activities (Activities A and C) was carried out between July 2002 and December 2003. Following a tender selection procedure, REMPEC appointed a consultancy firm, Environmental Protection Engineering. (E.P.E.) S.A. which carried out fact-finding missions in the relevant ports and terminals of the beneficiary countries between January and May 2003. In total, 55 ports/oil terminals were visited and assessed.

REMPEC circulated the Draft Final Reports to the relevant authorities of each beneficiary country for comments and the Consultancy Firm submitted the Final Reports in November 2003. REMPEC circulated the said final reports to the countries in December 2003.

#### 3.4 Implementation process of Activities B and D

In August 2003, REMPEC initiated preparatory activities for the implementation of Activity B of the Project, related to the preparation of a study concerning optimum solutions for collecting, treatment and disposal of relevant types of ship-generated solid and liquid wastes.

The work related to Activity B was based on the results of the first phase of the Project (Activities A and C) and was carried out by Tebodin Consultants and Engineers, which were selected by REMPEC in October 2003 following a tender selection procedure. The Draft Study

was submitted to the Centre for its comments in February 2004, whilst the Final Study was finalized and disseminated to the countries in April 2004.

The same Consultancy Firm was also selected to carry out Activity D of the Project, which consisted of the preparation of a Study related to standard designs and specifications for (a) oily wastes reception, treatment, storage and dewatering facilities and (b) garbage collection, treatment and disposal facilities. The work was based on the outcome of the Study for Activity B. The Draft Study was received at REMPEC in September 2004 for its review. The Final Study was submitted to the Centre in November 2004 and disseminated to the countries.

### 3.5 Regional Seminar on port reception facilities

The Regional Seminar organized at the end of the Project aimed at presenting the results of the activities carried out under the Project and discussing future measures that could be taken by the beneficiary countries in order to implement these results in their ports and terminals. The Seminar was successfully held in Malta between the 24 and 26 November 2004 and a report on the Seminar was disseminated to all participants and to all the Mediterranean countries involved in the Project as well as to the EC, IMO and UNEP/MAP.

#### 3.6 Project monitoring

A Project monitor appointed by the EC, EPU-NTUA Consortium of Greece, monitored the overall implementation of the Project during its three years implementation period. Copies of the final reports/studies produced for each activity of the project were forwarded to the monitor and three monitoring Meetings (once a year) were organised at the offices of REMPEC.

# 4 DETAILED DESCRIPTION OF THE IMPLEMENTATION PROCESS OF THE PROJECT

### 4.1 Implementation of the activities

Table 1 compares the actual year of implementation of the activities of the Project with the revised workplan of the Project (right column), which was included in the addendum 1 to the Project's Grant Agreement signed in April 2003. REMPEC carried out some activities planned for years 1 and 2 during years 2 and 3. This was due to the fact that a considerable period of time during year 1 was dedicated to the request for the extension of the Project and the related revision of the budget, and its subsequent submission to the EC. In addition, the needs assessment missions in the beneficiary countries for Activities A&C (a total of 12 missions) required careful preparation, planning and backstopping by REMPEC (from November 2002 till January 2003). The missions were carried out between January 2003 and May 2004.

<u>Table 1 – Actual implementation of activities compared to the revised workplan</u>

ACTUAL YEAR OF IMPLEMENTATION	REVISED WORKPLAN	
FIRST YEAR	FIRST YEAR	
Year 1	1- Setting up of the first Steering Committee	
Year 1	2- Completion of the Project Documentation	
Year 1	3- First Meeting of the Steering Committee	
Year 1	<ul> <li>Identification and selection of Consultants for activities A and C</li> </ul>	
Year 2	5- Fact-finding missions to beneficiary countries (activity A)	
Year 2	6- Fact-finding missions to beneficiary countries (activity C)	
Year 2	7- Preparation of the draft report on activity A	
Year 2	8- Preparation of the draft report on activity C	
SECOND YEAR	SECOND YEAR	
Year 2	1- Revision and completion of the report on activity A	
Year2	<ol><li>Revision and completion of the report on activity C</li></ol>	
Year 2	3- Dissemination of results of activities A and C	
Year 2	4- Second Steering Committee meeting	
Year 2	5- Identification and selection of Consultants for activity B	
Year 3	6- Start of work of activity B	
Year 3	7- Draft study concerning activity B	
Year 3	8- Revision and completion of the study on activity B	
Year 3	<ul> <li>9- Preparation of the call for proposals concerning standard designs for Port Reception Facilities and Treatment Plants</li> </ul>	
THIRD YEAR	THIRD YEAR	
Year 3	<ol> <li>Dissemination of the calls for proposals concerning standard designs (activity D)</li> </ol>	
Year 3	2- Collection of proposals (activity D)	
Year 3	3- Selection of best proposals	
Year 3	4- Preparation and organization of the Regional Seminar	
Year 3	5- Third meeting of the Steering Committee	
Year 3	6- Regional Seminar (activity E)	
Year 2&3	7- Dissemination of standards designs (activity D) and Study (activity B)	

### 4.2 Detailed Implementation Timetable of all the tasks related to the Project

Table 2 presents all the tasks related to the Project that were carried out between 01/01/2002 and 31/12/2004, grouped into first year (2002), second year (2003) and third year (2004), following the order appearing in the revised workplan. Therefore, you may notice that the timetable is not always chronologically consistent. This is due to the fact that there was some overlapping in the implementation of some activities of the Project. For easy reading and understanding, the tasks listed in the **revised workplan**, are shaded (clear Grey) in the table. Tasks that are not shaded are either additional tasks carried out in order to implement properly the Project (e.g. extension of the duration of the Project; briefing meetings) or detailed tasks (e.g. preparation of activities; dissemination of information etc.).

Table 2 – Implementation of the tasks related to the Project

### FIRST YEAR (2002)

Activities carried out	Timetable	Outputs
Recruitment of a technical	January 2002	Procedures for the recruitment of a technical assistant
assistant to the Project	E-1 2002	to the Project undertaken.
	February 2002	Appointment of a French PhD as technical assistant, Ms Lilia Khodjet El Khil, who joined the Centre on the
		18 February 2002.
Completion of the Project documentation	January-February	Drawing up of internal documents for the implementation of the Project (detailed timetable and
	2002	budget breakdown by activity)
	March 2002	Establishment of contacts with the European Commission's Directorate General for Transport and
Dissemination of information		Energy and with the Directorate General Europe Aid
about the overall Project		Co-operation Office
	April 2002	Circular letters sent to the REMPEC Focal Points of
	-	the beneficiary countries, as well as to the
		Mediterranean EU Member States (Spain, France, Italy and Greece), IMO, UNEP's Mediterranean Action Plan
		(MAP) and other relevant competent authorities.
Setting up of the first Steering Committee Meeting	March 2002	Preparations for the organization of the First Meeting of the Project's Steering Committee.
ottering committee meeting	22 March 2002	Invitation letters issued to EC, Mediterranean EU
		Member States, Project's beneficiary countries, IMO and MAP.
First Meeting of the Steering	6-7 May 2002	Holding of the First Steering Committee Meeting in
Committee		Malta.  Agreement of the First Steering Committee Meeting
		that the duration of the Project, in order to ensure its
		smoother implementation, should be extended from
		two years to three years, without increasing the total amount of the budget allocated for its implementation.
		Adoption by the Meeting of a new three-year workplan
	19 July 2002	submitted by REMPEC. Circulation of the Report of the said Steering
		Committee.
Extension of the duration of the Project	30 August 2002	Submission of a request to EC DG AIDCO for the extension of the duration of the Project, and
the Project		accordingly, for the reallocation of amounts from one
	27 Santambar	budget line to another.  Confirmation of the European Commission's
	27 September 2002	Confirmation of the European Commission's favourable consideration to REMPEC's request to
		extend the duration of the Project from two to three
Revision of the budget of the	October 2002	Preparation of a revised three year budget of the
operation		operation and a revised workplan of the Project, as requested by EC DG AIDCO
	01 November	Submission of a revised three-year budget of the
	2002	operation and revised workplan.
	December 2002-	Revision and completion of the above documentation.
	April 2003	

### FIRST YEAR (2002) (Cont.)

Activities carried out	Timetable	Outputs
Identification and selection of Consultants for Activities	June 2002	Identification of potential consultants and preparation of tenders documents
A&C	19 July 2002	Tenders/call for proposals issued
	August 2002	Setting up of the Tender Selection Committee.
	31 August 2002	Deadline for receipt of proposals from Consultants.
	19 September 2002	Convening of the Tender Selection Committee. The tender selection committee awarded the tender to Environmental Protection Engineering S.A. from Greece.
Dissemination of information		Relevant governmental and operational REMPEC focal
(Activities A&C)	12 November	points of the beneficiary countries informed about the
	2002	commencement of activities A&C and recommended to supply the necessary support.
Signing of Consultancy	November -	Preparation and finalization of the Consultancy
Contract (Activities A&C)	December 2002	Contract.
	6 December	
	2002	Signing of the consultancy contract.
Briefing meeting with the	4 December	Briefing meeting with the Consultants held at
Consultant (Activities A&C)	2002	REMPEC's offices.

### SECOND YEAR (2003)

Activities carried out	Timetable	Outputs
Preparation of Fact finding missions (Activities A&C)	January 2003	Agreement reached between REMPEC and the Consultant on a schedule for the missions as well as on a list of ports to be covered.
Dissemination of information (Activities A&C)	January-February 2003	Relevant governmental and operational REMPEC focal points informed that a consultant had been selected and that the consultancy related to the assessment of the situation and needs was soon to start.
Progress Report for 2002	27 February 2003	Submission by REMPEC to the DG AIDCO office of the EC of the Progress Report for 2002.
Fact finding missions to the beneficiary countries (Activities A&C)	January-May 2003	Fact-finding missions for Activities A&C of the Project carried out in the ten beneficiary countries.
Signature of an Addendum to the Grant Agreement	16 April 2003	Signature by both the EC and IMO (on behalf of REMPEC) of an addendum to the Grant Agreement, together with its revised workplan and three year budget of the operation.
Recruitment of a clerk secretary for the Project	April-May 2003	Procedures for the procurement of secretarial support services for the Project undertaken.
Preparation of the draft Final Reports (Activities A&C)	July 2003	Draft Final Reports prepared by the Consultancy firm, E.P.E S.A., submitted to REMPEC. Reviewing of and commenting on the draft Final Reports by REMPEC.
Circulation of the draft Final Reports (Activities A&C)	August 2003	Draft Final Reports circulated to relevant authorities of beneficiary countries for them to provide the Centre with any comment on the findings to their country.

### SECOND YEAR (2003) (Cont.)

Activities carried out	Timetable	Outputs
Progress Report for 2003	12 September 2003	Submission by REMPEC to the DG AIDCO office of the EC of the Progress Report for January-August 2003.
Revision and completion of the Final Reports (Activities A&C)	September- November 2003	Comments of REMPEC and those submitted by the beneficiary countries forwarded to the Consultant.
	26 November 2003	Submission of the Final Reports by the Consultant to REMPEC.
Dissemination of results (Activities A&C)	December 2003	Final Reports of Activities A&C disseminated to the beneficiary countries.
Preparation of the second Steering Committee Meeting and setting up of the Tender Selection Committee for Activity B	September- October 2003	Preparations for the organization of the Second Steering Committee Meeting initiated and invitation letters sent out.  According to its Terms of Reference, the Steering Committee Meeting was also tasked to provide guidance to REMPEC for the selection of the Consultant for Activity B of the Project.
Identification and selection of Consultants for Activity B	August 2003	Identification of potential consultants and preparation of tender documents.
	17 September 2003	Tenders/call for proposals issued.
	27 October 2003	Deadline for receipt of proposals from Consultants.
Second Meeting of the Steering Committee	30-31 October 2003	Holding in Malta of the Second Steering Committee Meeting which also acted as Tender Selection Committee for the implementation of Activity B of the Project. Selection of Tebodin Consultants and Engineers (The Netherlands) as consultants for Activity B of the Project.
	21 November 2003	Circulation of the Report of the Second Steering Committee Meeting.
Finalization of Consultancy Contract (Activity B)	November 2003	Preparation and finalization of the Consultancy Contract (Activity B).

### THIRD YEAR (2004)

Activities carried out	Timetable	Outputs	
Signing of Consultancy Contract (Activity B)	5 January 2004	Signing of Consultancy Contract by TEBODIN Consultants and Engineering.	
Start of work of Activity B	January 2004	Work of Activity B started.	
Briefing meeting with the Consultant (Activity B)	19 January 2004	Holding of a briefing meeting with the Consultant at REMPEC's premises.	
Draft study concerning Activity B	2 March 2004	Draft study submitted to REMPEC.	
Revision and completion of the study (Activity B)	March 2004	Draft study revised by REMPEC in order to ensure its consistency with both recommendations contained in the Final Reports produced for Activities A&C, and between French and English versions of the study. Draft study also revised by an independent Consultant appointed by the Centre to review in detail the draft Study from the technical point of view. Comments forwarded to the Consultants.	
	Mid-April 2004	Final study submitted to REMPEC.	
Dissemination of results (Activity B) and information	20 April 2004	Final study disseminated to the MEDA beneficiary countries, which were also updated on the current status of implementation of the Project.	
Preparation of the call for	February-March	Identification of potential consultants and preparations	
proposals (activity D)	2004	for call for proposals.	
Dissemination of the calls for proposals concerning standard designs (Activity D)	April 2004	Invitation to tender sent to potential consultant on 22 April 2004.	
Collection of proposals (Activity D)	May 2004	Deadline set for submission: 28 May 2004.	
Selection of best proposals	May -June 2004	Meeting of the Tender Opening Committee held on 1st June 2004.  Meeting of the Tender Selection committee held on 3d June 2004. Contract awarded to TEBODIN Consultants and Engineering.	
Finalization of Consultancy Contract (Activity D)	November 2003	Preparation and finalization of the Consultancy Contract.	
Briefing meeting with the Consultant (Activity D)	30 June 2004	Briefing meeting with the Consultant held at REMPEC's premises. Minutes of the meeting prepared (administrative, financial, technical matters and timetable were discussed and agreed upon). Original copies of Consultancy contract provided to Tebodin representatives, for signature by the Director of the consultancy firm.	

#### THIRD YEAR (2004) (Cont.)

Activities carried out	Timetable	Outputs	
Signing of Consultancy Contract (Activity D)	06 July 2004	Consultancy Contract by TEBODIN Consultants and Engineering signed.	
Work related to Activity D draft study	July-September 2004	Draft Study submitted to REMPEC on 3d September 2004.	
Dissemination of information	10 September 2004	MEDA beneficiary countries updated on the current status of implementation of the Project.	
Submission of the Final Study (Activity D)	September- November 2004	Draft Study reviewed by REMPEC during September and some recommendations for its improvement made. The final Study submitted on 8 November 2004.	
Preparation and organization of the Regional Seminar		It was agreed by the Second Meeting of the Steering Committee of the Project that, in order to ensure wider	
reparation and organization f the Third Meeting of the teering Committee  August-September 2004		participation, the Third Meeting of the Steering Committee should possibly be held back to back with the last activity of the Project, i.e. the Regional Seminar.  Letter of invitation to both Regional Seminar and Third Meeting of the Steering Committee sent out on 29 September 2004.	
Third Meeting of the Steering Committee	23 November 2004	Third Meeting of the Steering Committee held	
Regional Seminar (Activity E)	24-26 November 2004	Results of the Project presented. Future measures for the implementation of these results discussed.	
Dissemination of standard designs (Activity D) and Study (Activity B)	November 2004	Final Study of Activity D disseminated on 19 November 2004, prior to the Meeting of the Steering Committee/Regional Seminar, and Final Study of Activity B on 20 April 2004.	

### 5 OUTPUTS OF THE PROJECT

- <u>5.1</u> <u>Outputs related to activities A&C</u> (identification of required capabilities for collection and treatment of relevant types of solid and liquid wastes)
- **5.1.1** The first output is the availability of the information related to the actual existing situation regarding port reception facilities for collecting ship-generated garbage, bilge waters and oily wastes in the relevant ports and terminals (loading/unloading operation areas) in the ten beneficiary countries of the Project.
- **5.1.2** The **second output** is the **identification of needs for each relevant port** by the full evaluation of ship traffic movements and the estimated quantities of oil and garbage, with reference to the MARPOL 73/78 Convention regulations as well as the EU Directive 2000/59/EC on port reception facilities (particularly in the case of Cyprus and Malta).

These outputs were attained through an assessment carried out in each relevant port/terminal of the beneficiary countries. The assessment included the following:

- Specific nature of traffic in each country and each port, i.e. present shipping traffic and future trends in shipping traffic;
- Data on oily wastes and garbage in ports and terminals;
- Port characteristics, including port lay-out, commodity flows, information on companies or other organizations which could possibly receive and process certain wastes;
- Ship characteristics, i.e. type, size, ship requirements for access to reception facilities including size limitations;
- Type and capacity of existing installations (all types: fixed, mobile, floating installations), if any, extended to recycling ship-generated wastes, options for final disposal, financing and cost recovery, co-ordination of port and ship requirements;
- Adequacy of existing installations;
- Existing legislative, administrative and regulatory regimes at port/local/national level in order to assess the framework within which the collection of bilge waters, oily wastes and ship-generated garbage are managed and proposals to improve and refine this framework, taking into consideration the applicable EU legislation on reception facilities;
- Specific requirements resulting from the differences between nature of traffic and available installations, including port space requirements (also for possible extension), according to the requirements of Annex I and Annex V to MARPOL 73/78.

#### 5.2 Outputs related to Activities B and D

**5.2.1** Activity **B** (optimum solutions for collecting, treatment and disposal of relevant types of ship-generated solid and liquid wastes)

The Project's beneficiary countries were provided with realistic, applicable proposals for adequate port reception facilities, taking into consideration specific circumstances of each country and/or port concerned, and based on the best available technology. This specifically included:

- Review of currently available technologies and options for collection, treatment and disposal of relevant types of ship-generated solid and liquid wastes;
- Proposal for and analysis of the optimum solutions for collecting, treatment and disposal of relevant types of ship-generated solid and liquid wastes in the relevant ports of the ten Mediterranean countries concerned. The proposal took into consideration the type and capacity of existing installations (all types: fixed, mobile, floating installations) and the required capacities defined during the first phase of the project. Analysis addressed *inter alia* waste treatment and options for final disposal, financing and cost recovery, coordination of port and ship requirements (e.g. prior notification to the port);

- Evaluation of the adequacy of existing and proposed installations. The proposed solutions took into consideration specific requirements of MARPOL 73/78 Convention in respect to the adequacy of such port reception facilities in terms of their location, access, security, visibility, and in particular the requirement that no undue delays are caused to ships using them.
- **5.2.2** Activity **D** (standard designs for (a) oily wastes reception, treatment, storage and dewatering facilities and (b) garbage collection, treatment and disposal facilities)

The Project's beneficiary countries were provided free of charge with a study containing standard designs and technical specifications, which could be utilized for the setting up of reception facilities in their ports. This included in particular:

- A review and description of the port reception facilities proposed in the Activity B Study, as well as a set of relevant comments/recommendations including *inter alia* model capacities, locally *versus* internationally produced goods, and level of elaboration regarding drawings and specifications for individual ports;
- Functional specification describing the scope of supply regarding facilities for oily wastes;
- Detailed technical drawings and specifications for oily wastes reception and garbage transfer stations. Each drawing contained an indication of effluent quality for the suggested module(s), taking into account the applicable European Union (EU) standards, if any, or best practices currently applied by EU Member States.

### 5.3 Outputs related to Activity E (Regional Seminar)

The objectives of the Seminar were to present and discuss the results of the MEDA Project and of REMPEC's complementary activities, and to discuss and decide upon actions to be taken by the Mediterranean coastal States with a view to implementing the results of these activities and reducing the pollution of the Mediterranean Sea from ship-generated pollution.

The first part of the programme (Day 1 of the Seminar) introduced the topic of port reception facilities for ship-generated solid and liquid wastes with particular reference to the latest developments, at the international and the European level, with regard to the regulatory aspect. The perspective of the shipping industry as user of the reception facilities was also presented during the first day of the Seminar.

The second part of the Seminar (Day 2) was devoted to the activities of the MEDA Project and REMPEC's complementary activities in other Mediterranean States. A summary of the results of both the MEDA Project and of the complementary activities was in fact presented to the Seminar participants by the consultants who were engaged by REMPEC to implement the various activities.

The third and final part of the Seminar (Day 3) was dedicated to the planning, setting up, financing, and operation of port reception facilities. The experiences of the French port of Le Havre and of the Baltic region in the management of ship-generated waste and in particular in the setting up and operation of port reception facilities provided participants with practical examples. A presentation on the management and cost recovery of port reception facilities outlined the different systems of direct and indirect fees that are applied for ship-generated waste collection and treatment. Finally, a presentation on project financing possibilities for the

setting up of port reception facilities was delivered at the end of the Seminar. Each presentation was followed by questions and comments from the Seminar participants. Moreover, a questions and discussion session concluded each day of the Seminar.

Future actions that could be taken by the Mediterranean coastal States with a view to implementing the results of these activities were also discussed during the Seminar. During the last session, the participants were invited to discuss and adopt the draft Resolution entitled "Implementation of the Results of the EC/MEDA Financed Project on Port Reception Facilities in the Mediterranean and of REMPEC's Complementary Activities" which was drafted by REMPEC, and discussed and reviewed by the Third and Final Meeting of the Steering Committee of the MEDA Project. The Resolution endorsed the results of the MEDA Project and REMPEC's complementary activities and outlines further actions for their implementation at the national, bilateral, multilateral and regional level.

The active participation of the participants and their feedback indicated that the main objectives of the Seminar were achieved. Moreover, the decision of some Mediterranean States to include in their delegations members whose participation was not sponsored by either the MEDA Project or by REMPEC, indicated the importance attached to the Seminar by the Mediterranean countries.

### 6 FURTHER APPLICATION OF THE PROJECT RESULTS

### 6.1 Complementary Activities

It is important to point out, as a positive impact of the Project, that similar activities were also carried out in four other Mediterranean countries that did not benefit from the Project, namely Albania, Croatia, Slovenia and Libya (4 ports). Moreover, an assessment of the situation and needs (similar to Activities A&C) was also carried out, on behalf of the IMO, in the port of Aqaba, following a specific request from Jordan. In addition, Serbia & Montenegro expressed the wish to have a similar assessment carried out in its relevant ports some time in the future. The following table shows the complementary activities carried out in the abovementioned countries.

Table 1- Similar activities carried out in non-MEDA beneficiary countries

Activity Country	Similar to A & C (Assessment of the Situation and Needs)	Similar to B (Optimum Solutions)
Albania, Croatia and Slovenia	✓	✓
Libya (4 ports)	✓	
Jordan	✓	

Note: standard designs and specifications for (a) oily wastes reception, treatment, storage and dewatering facilities and (b) garbage collection, treatment and disposal facilities produced under Activity D of the MEDA Project were also made available to Mediterranean countries not benefiting from the MEDA Project.

#### 6.2 Financial Support

REMPEC's Mediterranean Trust Fund (MTF) budget and IMO's Integrated Technical Cooperation Programme (ITCP) provided financial support for the implementation of the complementary activities mentioned above, as appears in the following table:

Table 2- Financial support for similar activities

Financed Budget	Activities	Participation to Seminar
REMPEC (Mediterranean Trust Fund Budget)	Albania, Croatia and Slovenia	_
IMO		Albania, Bosnia & Herzegovina,
(Integrated Technical	Libya and Jordan	Croatia, Slovenia, Libya, Jordan
Cooperation Programme)		and Serbia-Montenegro

It should be noted that in order to allow the non-MEDA beneficiary countries to benefit from the Regional Seminar's expected outcome, REMPEC succeeded in sourcing the necessary financial resources to cover the participation of these countries in the Seminar. While the participation of representatives of the beneficiary countries of the MEDA Project on Port Reception Facilities (i.e.: Algeria; Cyprus; Egypt; Israel; Lebanon; Malta; Morocco; Tunisia; Turkey and Syria) at the Regional Seminar was financed from the budget of the Project, the participation of representatives of countries involved in REMPEC's complementary activities (i.e.: Albania, Bosnia and Herzegovina, Croatia, Jordan, Libya, Slovenia and Serbia and Montenegro) was financed by IMO's Integrated Technical Co-operation Programme 2004 - 2005.

### 7 DELIVERABLES AND DISSEMINATION OF INFORMATION

#### 7.1 Deliverables related to Activities carried out

### 7.1.1 Within the MEDA Project:

For Activities A&C, fact-finding mission reports, draft reports, draft final reports and final reports were produced. For Activities B and D, draft studies and final studies were produced. The following Final Reports/Studies were delivered in both English and French languages:

Activity A: - "Collection and treatment of solid and liquid wastes";
Activity C: - "Collection and treatment of oily ballast waters from tankers";

Activity B: - "Optimum solutions for collecting, treatment and disposal of relevant

ship-generated solid and liquid wastes";

Activity D: - "Standard designs for (a) oily wastes reception, treatment, storage and

dewatering facilities and (b) garbage collection, treatment and disposal

facilities";

- Activity E: "Report of the Regional Seminar on Port Reception Facilities for Collecting Ship-Generated Garbage, Bilge Waters and Oily Wastes in the Mediterranean, Malta, 24-26 November 2004";
  - Resolution entitled "Implementation of the Results of the EC/MEDA Financed Project on Port Reception Facilities in the Mediterranean and of REMPEC's Complementary Activities";
  - Information documents and presentations of the lecturers.

#### 7.1.2 Similar activities carried out in countries which did not benefit from the Project:

The following Final Reports/Studies were delivered in both English and French languages:

#### Adriatic countries (Albania, Croatia and Slovenia):

Activity 1: - "Collection and treatment of solid and liquid wastes";

Activity 2: - "Collection and treatment of oily ballast waters from tankers";

Activity 3: - "Optimum solutions for collecting, treatment and disposal of relevant ship-generated solid and liquid wastes in Albania, Croatia and Slovenia".

#### Libya (Ports of Tripoli, Misurata, Khoms and Zawia terminal):

Activity 1: - "Collection and treatment of solid and liquid wastes";

Activity 2: - "Collection and treatment of oily ballast waters from tankers".

### Port of Aqaba, Jordan:

Activities 1&2: - "Collection and treatment of solid and liquid wastes from ships and oily ballast waters from tankers".

### 7.2 Reports of the Meetings of the Steering Committee

The following reports were produced by REMPEC:

- Report of the first Meeting of the Steering Committee of the MEDA Project on Port Reception Facilities for Collecting ship-generated Garbage, Bilge Waters and Oily Wastes (Malta, 06-07 May 2002);
- Report of the second Meeting of the Steering Committee of the MEDA Project on Port Reception Facilities for Collecting ship-generated Garbage, Bilge Waters and Oily Wastes (Malta, 30-31 October 2003);
- Report of the third Meeting of the Steering Committee of the MEDA Project on Port Reception Facilities for Collecting ship-generated Garbage, Bilge Waters and Oily Wastes (Malta, 23 November 2004).

### 7.3 Dissemination of information

The final reports/studies produced for each activity of the Project were disseminated to the competent national authorities of the Project's beneficiary countries and of the Mediterranean EU Member States (France, Greece, Italy and Spain) as well as to the EC, IMO and UNEP/MAP. Final reports/studies produced for REMPEC's complementary activities were also disseminated to the competent national authorities of the countries involved.

In order to facilitate the dissemination of information on the results of both the MEDA Project on Ports Reception Facilities and similar activities carried out in the non-MEDA beneficiary

countries, all Final Reports were posted in both English and French version on the REMPEC website (<a href="www.rempec.org">www.rempec.org</a>), page "Publications", under "Reports/Projects".

The EU Visibility Guidelines for External Actions (December 2003), drawn up to ensure that projects that are wholly or partially funded by the European Union (EU) visibly acknowledge the support of the EU, were taken into consideration when implementing the Project and disseminating information. In fact, every effort was made to ensure that the support of the EU was duly acknowledged.

#### 8 CONCLUSION

### 8.1 Towards provision of adequate port reception facilities in the Mediterranean

The overall objective of the Project, as stated above, was to facilitate the implementation in the Mediterranean region of the International Convention for the Prevention of Pollution from Ships 1973/78 (MARPOL 73/78), with respect to the provision of adequate port reception. The specific objectives of the Project, i.e. assessing the existing situation in the in relevant ports/terminals of the beneficiary countries as well as proposing optimal solutions for adequate reception facilities and providing relative designs, were achieved.

The primary responsibility for the implementation of the MARPOL 73/78 requirements being with the beneficiary countries, it is assumed that as a result of the technical assistance provided through the Project (i.e. an assessment of the situation and needs, a harmonised knowledge of international and European standards, as well as the necessary know-how relating to adequate facilities and relative engineering/specification aspects), the beneficiary countries are now in a better position to comply with the above mentioned regulations. Witness of this fact is, for example, Turkey, which has adopted in March 2004 new regulations to comply with both MARPOL 73/78 and the relevant EU Directive provisions, and which has informed REMPEC that guidelines for the implementation of these regulations were to be prepared using the report of the Activity B of the Project as a basic reference document.

### 8.2 Beyond the EC/MEDA financed Project on port reception facilities

Taking into consideration the importance of ensuring the existence and adequacy of reception facilities in all ports/terminals of the Mediterranean region, the activities planned under the MEDA Project were extended as far as possible to Mediterranean countries that did not benefit from the present Project. The aim was to provide all Mediterranean countries with the same expertise in the field, taking also into consideration the EU standards, particularly those contained in the EC Directive on port reception facilities (2000/59/EC Directive of 27 November 2000). As a result, with the exception of Bosnia-Herzegovina and Serbia & Montenegro as well as some ports of Libya, all relevant ports/terminal of non-EU Mediterranean countries were assessed. In addition, optimum solutions and standards designs were also provided for the ports/terminals of Albania, Croatia and Slovenia. It should be noted, as far as standard designs are concerned, that these can be used in all ports/terminals of the Mediterranean. Indeed, the drawings were conceived in order to cover a range of nine different types of facilities (3 modules combined with 3 different capacities). Consequently, the Study

related to standard designs was disseminated to all Mediterranean countries that did not participate in the present Project.

### 8.2 Follow-up of the results of the Project

The feedback of the countries during the implementation of the Project and their active participation during the Regional Seminar indicated the importance attached by the Mediterranean countries to the Project and in particular to the follow-up of the results achieved.

Various countries emphasised the importance of the implementation of the results of the Project with particular reference to possible further future assistance. REMPEC endeavoured, during the Seminar, to tackle the issue of financing as well as cost recovery aspects. In this regard, several options for the establishment and financing of reception facilities, including the possibility to contract out the setting up and operation of the facilities, were presented to the participants.

Indeed, the participants in the Regional Seminar made special emphasis on the need for an appropriate follow-up of the achievements of the Project by adopting a Resolution entitled "Implementation of the Results of the EC/MEDA Financed Project on Port Reception Facilities in the Mediterranean and of REMPEC's Complementary Activities", in which a set of actions for the follow-up and implementation of the results of the Project are listed.

It was decided in particular to "review and report to REMPEC, and through REMPEC to all Mediterranean coastal States, on the follow-up and implementation of these results for the setting up of reception facilities in their ports and terminals". Moreover, the respective countries were invited to "endeavor to take all necessary measures in order to implement these results in their ports and terminals" and further support by REMPEC was requested by the countries "with a view to identifying possible sources of financing for the effective implementation of these results".

As stated during the concluding Seminar, although the primary responsibility for the implementation of the results of the MEDA Project and the related complementary activities rested with the beneficiary countries, the Centre would be ready to provide any technical assistance that might be requested by Mediterranean countries with regard to the concrete implementation of these results. The follow-up work on port reception facilities could be included in the Centre's future work programme, which would be adopted by the Meeting of REMPEC Focal Points and by the Meeting of the Contracting Parties to the Barcelona Convention. This follow-up work could be of a regional nature or could take the form of assistance to individual requests from the countries.