



#### MEDITERRANEAN ACTION PLAN (MAP) REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THEMEDITERRANEAN SEA (REMPEC)

Meeting of National Experts on the Revision of the Regional Strategy for Prevention and Response to Marine Pollution from Ships REMPEC/WG.36/4 Date: 2 February 2015

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Agenda Item 4

#### SYNTHETIC REPORT ON THE ASSESSMENT OF THE IMPLEMENTATION OF THE REGIONAL STRATEGY FOR PREVENTION OF AND RESPONSE TO MARINE POLLUTION FROM SHIPS (2005-2015)

Note by the Secretariat

SUMMARY										
Executive Summary:	This document provides brief information on the action to be taken by the Meeting.									
Action to be taken:	The Meeting will be invited to comment and take note of the information provided in the present document.									
Related documents:	UNEP(DEC)/MED IG.16/10									

#### Revision of the Regional Strategy for Prevention of and Response to Marine Pollution from Ships (2005-2015)

Synthetic report on the Assessment of the Implementation of the Regional Strategy for Prevention of and Response to Marine Pollution from Ships (2005-2015)

2 February 2015

#### 1 BACKGROUND

1.1 Following the adoption, in 2002, of the Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (the 2002 Prevention and Emergency Protocol), and responding to a recommendation of the Parties to the Barcelona Convention, the 14<sup>th</sup> Ordinary Meeting of the Contracting Parties to the Convention adopted, in 2005, a Regional Strategy for Prevention of and Response to Marine Pollution from Ships (UNEP(DEC)/MED IG.16/10) (the 2005 Regional Strategy). The 2005 Regional Strategy, designed to facilitate the implementation of the 2002 Prevention and Emergency Protocol, consists mainly of 21 objectives to be implemented by 2015.

1.2 In parallel to the preparation of the United Nations Environment Programme/Mediterranean Action Plan (UNEP/MAP)'s Integrated Six Year Programme of Work for the period 2016 to 2021 (Mid-Term Strategy) and the implementation of the Ecosystem Approach (EcAp) during the biennium 2014-2015, the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) is carrying out a revision of the 2005 Regional Strategy, seen as an integral part of the MAP's Mid-Term Strategy.

1.3 Based on identified priorities, the Centre will develop a new and updated Draft Regional Strategy (2016-2021) which, following discussion and review by the Contracting Parties at the REMPEC Focal Points Meeting and its ultimate adoption, will be integrated in UNEP/MAP's Mid-Term Strategy to be adopted by the Contracting Parties to the Barcelona Convention. To help with this task, the Centre has engaged the services of a Consultant with specified Terms of Reference. This mandate includes, in particular, the preparation, in consultation with REMPEC, of a synthetic report on the Assessment of the Implementation of the Regional Strategy for Prevention of and Response to Marine Pollution from Ships (2005-2015) based on the Contracting Parties' response to a request for information sent by REMPEC during the summer of 2014.

1.4 The REMPEC request for information consisted of a draft status of implementation of each Specific Objective of the 2005-2015 Regional Strategy by each Contracting Party, prepared with information available at the Centre as well as existing reporting procedures, including the REMPEC country profiles available on REMPEC's website and the Barcelona Convention Reporting System (BCRS), and was made with the purpose of facilitating the assessment of the implementation of the 2005 Regional Strategy. The request also included an assessment of the implementation of the Specific Objectives by REMPEC, as identified in the Regional Strategy. The Contracting Parties were kindly requested, where and when applicable, to review, amend and complete in track changes mode the information related to each Specific Objective and return the document to REMPEC via email, as early as possible but not later than 10 October 2014.

#### 2 INTRODUCTION

2.1 As of 16 January 2015, 16 Contracting Parties and the EU had reviewed/amended the REMPEC document. Considering that the synthetic exercise included in the present report should be the foundation on which the remaining stages leading to the preparation of a draft 2016-2021 Regional Strategy would rest, during the Kick-off Meeting held in Malta from 11 to 12 December 2014 it was agreed that the present report needed to be finalized in advance of the start of preparations of the Comparative Report, another important milestone in the revision process, which would demand considerable time and effort from REMPEC and the Consultant during the month of January 2015.

2.2 In the case of Contracting Governments which had not replied by 16 January 2015, the information collected by REMPEC and presented in the original request have not been used for the present exercise, as it had not been reviewed and modified as appropriate by the Administrations concerned. This exclusion should not distort the results, bearing in mind that the main purpose of the assessment was considered to be the identification of compliance gaps in the implementation of the 2005 Regional Strategy and that the data in hand would suffice to ascertain the degree of collective compliance among the Contracting Parties.

#### 3 **REPORT STRUCTURE AND CONTENTS**

3.1 The present report contains a synthetic assessment of the current status of implementation of the 2005 Regional Strategy by Contracting Parties and by REMPEC. As anticipated in previous paragraphs, the assessment is based on information extracted from the following:

.1 REMPEC's 2005 Regional Strategy Implementation Assessment, as reviewed/amended by some Contracting Governments;

.2 REMPEC's 2005 Regional Strategy Implementation Assessment as prepared by the Centre, corresponding to Contracting Governments that did not reply to REMPEC's request; and

.3 Assessment of REMPEC's implementation of the Specific Objectives of the 2005 Regional Strategy.

3.2 The outcome of the synthetic assessment is presented in **Annex 1**. For each of the specific objectives of the 2005 Regional Strategy, which are presented in the same order, there is an appraisal of the status of collective implementation, relevant observations on the current situation and associated recommendations which may be taken into consideration when preparing the draft 2006-2021 Revised Regional Strategy.

3.3 In presenting the assessed level of compliance with the specific objectives, care has been taken to avoid identifying individual States, as it was considered that such identification would not add value to the assessment exercise. Instead, the weight was placed on the collective response to the 2005 Regional Strategy and on whether the purpose of the specific objectives had been fulfilled.

3.4 It was difficult to assess the answers of the EU using the same criteria as per individual States. In general terms, it may be safely concluded that the EU has accomplished all the objectives than can be applicable to it, bearing in mind that, on many instances, it would have found impossible to take action strictly as if it were a single State.

3.5 Many Contracting Parties could not reply to direct questions either in the affirmative or the negative, mostly due to the fact that at the time of reporting they may have had the particular task in progress or for other reasons. In these cases, it has been deemed that the particular objective had not been achieved.

3.5 **Annex 2** basically contains a tabulated summary of the above assessment, which will facilitate reference to appropriate information at a glance. It should be noted that the names of individual Contracting Parties do not appear in the table.

#### 4 ACTION REQUESTED OF THE MEETING OF NATIONAL EXPERTS

4.1 **The Meeting will be invited to** comment and take note of the information provided in the present document.

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#### ANNEX 1

#### ASSESSMENT OF IMPLEMENTATION OF THE 2005 REGIONAL STRATEGY

#### 1 INTRODUCTION

The Regional Strategy for Prevention of and Response to Marine Pollution from Ships (2005-2015) (the 2005 Regional Strategy), taking into consideration the mission statement of REMPEC, the legal, financial and institutional framework of the Barcelona system, including in particular the provisions of the Prevention and Emergency Protocol, and the then present and expected future scenarios characterizing the maritime industry and the Mediterranean region, established the following general objectives:

- prevention of pollution from ships;
- prevention of maritime accidents; and
- preparation for response to major pollution incidents.

In addition, the 2005 Regional Strategy identified 21 specific objectives which, if achieved, would meet the above general objectives, as well as associated goals which would also serve as criteria for indicating the success (or otherwise) of Contracting Parties in meeting the objectives. The role of REMPEC would continue being primarily one of assistance to the Contracting Parties in enhancing their national capacities and in facilitating the means for regional or sub-regional cooperation.

As the end of the period for which the 2005 Regional Strategy was designed approaches, and in parallel to the preparation of United Nations Environment Programme/Mediterranean Action Plan (UNEP/MAP)'s Integrated Six Year Programme of Work for the period 2016 to 2021 (Mid-Term Strategy) and the implementation of the Ecosystem Approach (EcAp) during the biennium 2014-2015, REMPEC is carrying out a revision of the 2005 Regional Strategy. This revision which will cover the period 2016-2021 is seen as an integral part of the MAP's Mid-Term Strategy and, like the original Strategy, is also conceived as a tool to facilitate the implementation of the 2002 Prevention and Emergency Protocol.

As a first step of the revision process, it has been considered necessary to conduct an assessment of the current status of implementation of the 2005 Regional Strategy by the Contracting Governments and also by REMPEC. This assessment is based on information collected by REMPEC from available sources, information that, in the case of some Governments, has been reviewed and validated. In the instances where such review and validation has not been received, the data originally assembled by REMPEC has been used. The assessment also reflects the level of implementation of the requests that the 2005 Regional Strategy makes of the Secretariat (REMPEC).

The assessment presented hereunder contains, for ease of reference, a list of the relevant specific objectives, each followed by a succinct account of the general status of implementation in statistical terms, checked against the corresponding implementation goals and including in some cases recommendations which might be taken on board at the time of preparing the draft Revised General Strategy. It is important to note that the ensuing statements are factual in nature.

Finally, it is also worth noting that none of the data presented herein is associated to any Contracting Party in particular. However, notice should be taken of the fact that of the 17 Contracting Parties that replied to REMPEC's request for information 10 were non-EU countries.

#### 2 ASSESSMENT OF SPECIFIC OBJECTIVES

## SPECIFIC OBJECTIVE 1 Ratification of relevant international maritime conventions related to the protection of the marine environment

The Mediterranean Coastal States, Contracting Parties to the Barcelona Convention, agree:

- a) to ratify MARPOL Convention and its annexes by 2007, to ensure their transposition into national law, and to co-operate through REMPEC to ensure full compliance with its provisions;
- b) to ratify other IMO relevant international conventions as soon as possible but preferably by 2008, to ensure their transposition into national law by the same time and full compliance with their provisions;

To request the Secretariat:

c) to provide Mediterranean coastal States, which so request, with advice and assistance in order to meet the deadlines set forth in sub-paragraphs (a) and (b) above.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) At the time of reporting, only 7 of the 16 Contracting Parties plus the EU\* that provided data had ratified\*\* the MARPOL Convention and all of its six annexes. However, most of the Contracting Parties had ratified all of the annexes with the exception of Annex VI (MARPOL Protocol of 1997). REMPEC has provided assistance to facilitate the adoption and implementation of the Convention.

\* Although the EU as such cannot ratify the MARPOL Convention (only individual States can become Parties to MARPOL), it incorporates some of the Convention provisions into EU legislation in the form of Regulations, Directives and other instruments.

\*\* In this report, the meaning of the term "ratification" includes "signature", "acceptance", "approval", "accession" or any other instrument that a Government may utilize to become Party to an international convention.

**Recommendation 1 a)**: Given the crucial importance of the MARPOL Convention in protecting the marine environment through the implementation of prevention measures by the Mediterranean coastal States in a cooperative manner, Specific Objective 1 a) should be maintained in the Revised Regional Strategy 2016-2021. REMPEC should be requested to continue providing assistance to Contracting Parties which so request to ensure that all MARPOL annexes, as amended, are ratified and fully implemented as soon as possible but not later than [2016]. Special emphasis should be placed on Annex VI – Regulations for the Prevention of Air Pollution from Ships (1997 Protocol), including the amendments thereto, as well as on newly amended Annex V – Regulations for the prevention of Pollution by Garbage from Ships.

b) A clear majority of the Contracting Parties that provided data had ratified most of the IMO and other relevant international conventions. The ILO 1976 Convention and 1996 Protocol were an exception in some cases. It is assumed that the provisions of the ratified instruments have been transposed into national law and are being implemented.

**Recommendation 1 b)**: This specific objective should be kept in the Revised Regional Strategy 2016-2021 until there is evidence that all the Contracting Parties have ratified

the relevant instruments, including any applicable amendments thereto, and are implementing their provisions.

#### B Requests addressed to the Secretariat (REMPEC)

c) REMPEC provided advice and assistance upon request by the Contracting Parties and organized a number of technical assistance activities related to the ratification of relevant maritime conventions.

**Recommendation 1 c)**: Since the provision of advice and assistance to Contracting Parties and the organization of technical assistance activities are regular features of REMPEC's mandate, this specific objective should be maintained.

#### SPECIFIC OBJECTIVE 2 Ensuring effective maritime administrations

The Contracting Parties agree:

- a) that all Mediterranean States (which have not already done so) endeavour to enhance, on the basis of a national plan, the performance of their maritime administrations in accordance with the relative IMO recommendations and guidelines by 2010;
- b) that all Mediterranean States, in their efforts to protect the marine environment, should carry out, as far as possible, at regular intervals, a selfassessment of their capabilities and performance in giving full and complete effect to MARPOL, by using the guidance set out in the relevant IMO Resolution dealing with the self-assessment of flag State performance and, once adopted, with the Voluntary IMO Member State audit scheme and the Code on implementation of IMO mandatory instruments, both expected to be adopted by the IMO Assembly in 2005;

#### To request the Secretariat:

- c) to improve the knowledge and expertise of inspection officers by establishing through REMPEC, a programme of training activities related to relevant international instruments, in particular MARPOL, ensuring appropriate training for ship inspectors, commencing in 2006;
- d) to assist through REMPEC the Mediterranean coastal States which so request in the development of national plans designed to enhance the performance of their maritime administrations.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) Nine of the 17 Contracting Parties that replied to REMPEC's request for information had notified compliance with specific objective 2 a). In the case of the EU, the objective is deemed accomplished as they regularly review the implementation of the corresponding EU legislation, and therefore the relevant international legislation, by EU countries.

**Recommendation 2 a)**: The performance of a coastal State as it discharges its flag State responsibilities under regional and international conventions and other instruments addressing maritime safety and the protection of the marine environment from ship-generated pollution rests squarely on having a well-structured and efficient maritime administration. With the IMO Instruments Implementation Code (III Code) (resolution A.1070(28)) now binding under MARPOL, together with other related IMO codes and guidelines, the enhancing of the maritime administration performance is of

paramount importance. This specific objective should, therefore, be maintained with any necessary modifications.

b) Although some Contracting Parties are in line to undergo a self-assessment of their MARPOL implementation capabilities by undertaking the Voluntary IMO Member State Audit Scheme, 6 of 17 the Parties that replied, reported compliance with this objective, which is directly related to specific objective 2 a).

**Recommendation 2 b)**: The IMO Assembly, in December 2013, decided that all audits to be undertaken from the adoption of resolution A.1068(28) should be arranged and carried out in line with the Framework and Procedures for the IMO Member State Audit Scheme (resolution A.1067(28)) and using the III Code as the audit standard. The Assembly also urged Governments to continue to volunteer and make themselves available for audits. It has, therefore, become imperative that Contracting Parties that have not done so or that wish to test themselves against the new regime, undertake an audit to ascertain whether they implement and enforce the provisions of the relevant mandatory instruments, and that such audits are conducted in line with the said Framework and Procedures for the IMO Member State Audit Scheme and use of the IMO Instruments Implementation Code (III Code). This specific objective should, therefore, be maintained with any necessary modifications.

#### B Requests addressed to the Secretariat (REMPEC)

c) REMPEC implemented a program of training activities, especially within the framework of the EU funded SAFEMED I & II Projects, during which REMPEC organised a number of training activities for maritime administrations' personnel including flag State and port State control inspectors.

d) There were no specific requests by the Mediterranean coastal States for REMPEC to assist them in the development of any national plan to enhance the performance of their maritime administration. However, when so requested, REMPEC provided technical assistance on issues related to the performance of maritime administration.

In total, eight VIMSAS national Workshops were delivered, namely in Jordan (February 2010), in Israel and Turkey (June 2010), in Syria (September 2010), in Morocco (November 2010), in Lebanon (March 2011), in Tunisia (October 2011) and in Egypt (October/November 2011). Moreover, for those Beneficiaries that officially volunteered for VIMSAS, the Project offered further assistance in the form of a specific four-day workshop, a one-day high-level meeting focused on designing a strategy, and a mock-audit. Israel has benefitted from the mock audit in January 2012 whilst a specific workshop was held in Jordan in June 2012 and a mock audit was carried out in September 2012.

**Recommendation 2 c) & d)**: REMPEC should be requested to continue assisting the Mediterranean coastal States which so request in the development of national plans designed to enhance the performance of their maritime administrations, in line with new developments, in particular the IMO Instruments Implementation Code (III Code) and the Framework and Procedures for the IMO Member State Audit Scheme.

#### SPECIFIC OBJECTIVE 3

#### To strengthen the Memorandum of Understanding (MoU) on Port State Control (PSC) in the Mediterranean Region (Mediterranean MoU)

The Contracting Parties agree:

a) to mandate REMPEC to propose its assistance to the Mediterranean MoU on port State control in order to improve its effectiveness and, if so requested, to facilitate co-operation between the Paris MoU and the Mediterranean MoU; b) to make available the necessary resources and means to enable the Mediterranean MoU to function efficiently;

To request the Secretariat:

- c) to propose to the MoU Committee to participate in its meetings as an observer, and where possible, host its meetings;
- d) to associate itself with port State control training activities addressing environmental matters, including those related to the Anti Fouling Systems and Ballast Water Management conventions where appropriate, in collaboration with recognized training institutions within the region; and
- e) to work in association with the MoUs on port State control on the organization and follow up analysis of concentrated inspections campaigns on MARPOL related deficiencies.
- f) To define the modalities that would enable REMPEC to support the work of the MoU Committee and to report to its meetings of focal points.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) & b) Only a third of the Contracting Parties that replied to REMPEC's request for information, most of them non-EU States, had made available the necessary resources and means for efficient functioning of the Mediterranean MoU and had provided data on periodic inspections, number of ships detained by PSC in the three-year period 2011 to 2013, and number of PSC inspections. Of the rest, some are not members of the MoU and some others are in the process of becoming members.

**Recommendation 3 a) & b)**: For the Mediterranean MoU to function according to the aims and objectives on which it was created, its membership should encompass all the coastal States of the Mediterranean or, at least, all the non-EU Mediterranean States. Further, the Mediterranean MoU and the Paris MoU should fully cooperate on matters of common interest, considering that some Contracting Parties are members of both memoranda and that both MoUs share common geographic areas.

The Mediterranean MoU constituent States should undertake to support its functioning with all the means and resources needed, as stated in specific objective 3 b) above. Inasmuch as this objective has not been fulfilled, it is recommended that it be maintained in the Revised Regional Strategy, with any necessary modifications.

#### **B** Requests addressed to the Secretariat (REMPEC)

c) REMPEC participated in a number of Med MoU on Port State Control Committee Meetings.

d) REMPEC carried out various activities related to Port State Control: In 2012, the SafeMed II Project developed an electronic decision-support tool for the Med MoU Port State Control Officers (PSCOs). Moreover, an updated MED Manual on PSC Procedures was submitted to the Med MoU on PSC for consideration and was adopted by the 14th Med MoU Committee Meeting. It can also be noted that there were specific REMPEC training courses on the AFS and the Ballast Water Management Conventions which included aspects of PSC.

e) REMPEC has not been in a position to take action.

f) REMPEC, through the EU-funded SafeMed II Project provided assistance for the upgrade of the IT infrastructure of the Med MoU InfoCentre and the development of a decision-support tool

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for the Med MoU Port State Control Officers (PSCOs). The upgrade of Med MoU InfoCentre IT infrastructure led to the Med MoU being the first Port State Control regime to report its inspections in the applicable IMO GISIS module, thus relieving the Med MoU members of their individual obligations to report detentions under the applicable provisions of the SOLAS and MARPOL Conventions.

As regards the MED MoU decision-support tool, after agreement with the EC on the content and modalities, a full tender was issued by IMO and subsequently a contract was signed with KRS for the development and delivery of this Decision-Support-Tool for the Med MoU PSCOs. Meanwhile, following consultations with and clearance by the EC, a specific server for the Med MoU InfoCentre was purchased to host the online version of MedRules whilst software adaptations to realise the integration of MedRules to MEDSIS were also carried out. The MedRules was successfully delivered during the 14th Committee Meeting of the Med MoU held in October 2012. Two versions of the tool were made available for PSCOs: an online and a stand-alone version. The online version will be hosted with the Med MoU Information System, MEDSIS. For the stand-alone version, following approval of the EC, arrangements were made to procure a laptop for the use of each PSCO of the Med MoU members that are also SafeMed II Project beneficiaries. Following a tender procedure carried out through IMO, these laptops were dispatched to the beneficiaries in December 2012.

**Recommendation 3 c), d), e) & f)**: The requests made of REMPEC may be considered fulfilled. Notwithstanding, the Centre should continue to support the work of the Mediterranean MoU within its means and capabilities, and potentiate its relations with the Paris MoU. REMPEC should also continue assisting Mediterranean countries that so request to become members of the Mediterranean MoU.

#### SPECIFIC OBJECTIVE 4 Provision of reception facilities in ports

The Contracting Parties agree:

- a) to consider by 2007 the establishment of procedures related to the cost of the use of reception facilities, enabling their use as soon as they are available at a fee which should be reasonable and should not serve as a disincentive for their use;
- b) For garbage:
  - *i)* all major ports to install facilities for the collection of garbage and procedures for its disposal by 2010;
  - *ii)* collection and disposal procedures for garbage to be in place for all major ports by 2010;
- c) For oily wastes:
  - *i)* all major ports to establish collection, treatment and disposal procedures for bilge waters, oily residues and dirty ballast waters by 2010;
  - *ii)* collection, treatment and disposal procedures for bilge waters, oily residues and dirty ballast waters to be in place for all major ports by 2010;
- d) For Noxious Liquid Substances (NLS):
  - *i)* all major ports handling NLS to establish collection, treatment and disposal procedures for NLS by 2010;
  - *ii)* collection, treatment and disposal procedures for NLS to be in place for all major ports by 2010;

- e) For sewage:
  - *i)* all major ports to establish collection and treatment procedures for sewage by 2010;
  - *ii)* collection and treatment procedures for sewage to be in place for all major ports by 2010;
- f) For ballast water and sediments:
  - *i)* all major oil and chemical terminals to establish collection, treatment and disposal procedures for ballast waters by 2012;
  - *ii)* all major ports and terminals where cleaning or repair of ballast tanks occurs to endeavour to take action to be in a position to comply with the provisions of the 2004 Ballast Water Convention by 2012, or by its entry-into-force date, whichever comes earlier.

#### A Commitments of the Contracting Parties

The implementation of the MARPOL Convention requires its Parties to ensure the provision of port reception facilities that can receive shipboard residues and mixtures covered under its various annexes. Therefore, failure to provide such facilities will mean a breach of international commitments under the Convention and, furthermore, may give way to unscrupulous ship operators to illegally discharge prohibited matter into the sea. The need to avoid these discharges is crucial in the case of a virtually closed body of water, such as the Mediterranean sea. Although this rationale is well known and has been underscored time and time again ever since MARPOL was adopted, some coastal States still find it difficult, possibly on account of perceived excessive cost, to provide even their major ports with the reception facilities they are obliged to under the MARPOL annexes they have ratified.

Judging by the replies to REMPEC's request for information, and without referring in statistical detail to the different reception facilities specified in the above sub-objectives, it is clear that there is still a number of Contracting Parties that should seriously consider "the establishment of procedures related to the cost of the use of reception facilities, enabling their use as soon as they are available at a fee which should be reasonable and should not serve as a disincentive for their use", an objective that should entail the actual provision of the facilities concerned.

**Recommendation 4 a) to 4 f)**: In recognition of the crucial importance that the provision of adequate reception facilities required under the relevant MARPOL annexes has to the protection of the marine environment in the Mediterranean, and bearing in mind that there are still a number of Contracting Parties that have found it challenging to ensure that their major ports are provided with such facilities, it is recommended that this specific objective be kept, modified as necessary, in the 2016-2021 Revised Regional Strategy. Furthermore, the integration of port reception facilities into an established waste management strategy, either local or national, should be seriously considered. It is also recommended that REMPEC be request to facilitate further advice on the above to Contracting Parties which so require.

#### B Requests addressed to the Secretariat (REMPEC)

Not applicable to REMPEC.

**Recommendation**: Although it is acknowledged that REMPEC has dedicated much time and effort to this challenging but critical issue over many years, it is recommended that the Centre considers preparing well-structured advice, based on previous work done on this matter, taking into account the latest edition of the IMO Comprehensive

Manual on Port Reception Facilities and the new requirements incorporated since 2005 in the relevant MARPOL Annexes.

#### SPECIFIC OBJECTIVE 5 Delivery of ship-generated wastes

The Contracting Parties agree:

- a) to establish, by 2007, a system of notification to a vessel's next port of call of the status of its onboard retention of bilge waters and oily wastes and garbage;
- b) that all Mediterranean States implement by 2010 national regulations empowering maritime authorities to require, if they deem it necessary, the Masters of vessels to discharge wastes into designated port reception facilities before sailing.

### Assessment of compliance with the implementation goals, as stipulated in Annex 1 of the 2005 Regional Strategy

#### A Commitments of the Contracting Parties

a) & b) These two sub-objectives entail the establishment of a notification system and the enactment of specific legislation, neither of which should necessitate funding or human resources in excess of that already allocated to the running of the maritime administration. However, approximately half of the Contracting Parties that replied to REMPEC's request for information, have not fulfilled either or both of the above objectives. This specific objective is related to the previous one, which addresses the provision of port reception facilities, and thus, most of the stated arguments regarding the protection of the Mediterranean waters apply, in particular with reference to MARPOL Annexes I and V.

**Recommendation 5 a) & 5 b)**: The provision of efficient national procedures and systems that guarantee the integral management of ship-delivered wastes can significantly contribute to reducing considerably the occurrence of illegal discharges by ships. Inasmuch as only a number of Contracting Governments have fulfilled this specific objective, it is recommended that it be kept in the Revised Regional Strategy.

#### B Requests addressed to the Secretariat (REMPEC)

**Recommendation 5**: Although this objective was not marked as applicable to REMPEC under the 2005 Regional Strategy, it is recommended that the Centre provide any advice on the subject as may be requested by Contracting Parties, possibly in association with advice requested on the provision of port reception facilities.

# SPECIFIC OBJECTIVE 6 Improved follow-up of pollution events as well as monitoring and surveillance of illicit discharges

The Contracting Parties agree:

- a) to establish, by 2010, systems and procedures for national monitoring and surveillance including, where practicable, aerial surveillance in the waters under the jurisdiction of Contracting Parties and to report the results to the regular meetings of REMPEC Focal Points;
- b) to endeavour to establish, by 2010, sub-regional systems, including procedures to over-fly the waters under the jurisdiction of a neighbouring State if the Parties so agree, for surveillance of environmentally sensitive and/or high risk zones of the Mediterranean Sea;

To request the Secretariat:

- c) to carry out pilot projects in the field of monitoring and surveillance of illicit discharges from ships by 2010;
- d) to establish Memoranda of Understanding with agencies or competent bodies whereby REMPEC will act as the focal point between these agencies and bodies and coastal States on possible occurrences of marine pollution identified by satellite.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) Of the Contracting Parties that replied to REMPEC's request for information, only four EU States and two non-EU States reported compliance with this sub-objective, although there are EU systems and procedures in place on aerial surveillance. This issue may need a deeper analysis of the reasons behind the current status of affairs, analysis that goes beyond the scope of this report.

b) As to the establishment of sub-regional systems, the level of fulfilment is even lower, considering that only three of the 17 Contracting Governments reported having established such systems. As per the previous sub-objective, the EU has systems and procedures in place.

**Recommendation 6 a) & 6 b)**: The reasons behind the non-fulfillment of Specific Objective 6, calling for the establishment of improved follow-up of pollution events as well as monitoring and surveillance of illicit discharges, by most Contracting Governments should be analysed. The Specific Objective should be maintained, as may be modified to take account of any advances on this matter.

#### B Requests addressed to the Secretariat (REMPEC)

c) REMPEC organised a number of activities regarding this issue, for instance, the Coordinated Aerial Surveillance Operation for illicit ship pollution discharges (opération de surveillance coordonnée aérienne des rejets des navires en Méditerranée – OSCAR-MED) in October 2009 as well as the OSCAR MED 2013 in June 2013. Between September 2007 and January 2009, REMPEC implemented the MARCOAST Project for Algeria, Morocco and Tunisia aimed at providing an operational satellite monitoring service. Moreover, between 2005 and 2006, the Centre, in co-operation with other partners, implemented the AESOP Project in the Adriatic.

d) REMPEC has not been in a position to take action.

**Recommendation 6 c)**: REMPEC should, building on the experience gathered from the activities carried out on national monitoring and surveillance, continue organizing and participating in, funding and human resources permitting, any new activities on this issue where the Centre is requested to play such role. The reasons behind the reported non-compliance by most of the Contracting Parties that replied to REMPEC's request for information should be analyzed.

**Recommendation 6 d)**: Contracting Parties should consider providing REMPEC with the necessary means to fulfil this sub-objective.

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# SPECIFIC OBJECTIVE 7 To improve the level of enforcement and the prosecution of discharge offenders

The Contracting Parties agree:

- a) that by 2010 at the latest, all Mediterranean States ensure the existence of a national legal framework (regulations) as a basis for prosecuting discharge offenders for infringements of the MARPOL Convention or of any national legal framework implementing it;
- b) to endeavour to adopt common rules and harmonize sanctions by 2015 with a view to ensuring even-handed treatment of discharge offenders throughout the Mediterranean region;
- c) with due regard to their national legal provisions, by 2011 to share collected data, and facilitate acceptance of the evidence gathered by other States, to ensure the successful prosecution of discharge offenders;
- d) to establish, when and where possible, and without prejudice to the sovereign right of the States, of areas under their jurisdiction enabling the implementation of the MARPOL Convention in term of prosecution of offenders. Such areas can be developed on a regional or sub-regional basis, in a coordinated way and in compliance with international law as defined by UNCLOS;

To request the Secretariat:

e) to carry out pilot projects in this field, including a compilation of national, legal and institutional arrangements as well as to disseminate information to enforcement personnel and legal personnel/prosecutors/magistrates on the relevant issues required to secure successful prosecutions in court, e.g. procedures for the collection of data, submission of evidence to courts, etc., with the aim of achieving the necessary expertise in all Mediterranean States by 2009.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) Ten out of 17 Contracting Parties that replied to REMPEC's request for information, reported that they had in place a national legal framework that enabled the Administration to prosecute discharge offenders, and it is understood that the remaining are in the process of adopting enabling national legislation. The next step would be to strictly enforce such legal frameworks within national waters.

b to d) When it comes to coordinating enforcing and prosecution actions at regional or subregional level (harmonizing sanctions, data sharing and establishment of common prosecution areas), at the time of reporting most Contracting Parties had not been able to fulfill these three sub-objectives, although, as in the previous case, some States are taking measures on these matters. In particular, it is worth mentioning the creation of a network of prosecutors in the Mediterranean region and the Meeting on the Establishment of a Network of Law Enforcement Officials relating to MARPOL in the Mediterranean Sea (MENELAS), propitiated by REMPEC. It can be concluded, therefore, that appropriate action is being taken and that, given time, this important specific objective will be largely accomplished.

**Recommendation 7 a) to 7 d)**: Although there is evidence of progress being made to improve the level of enforcement and prosecution of MARPOL offenders, both at national and regional or sub-regional level, the specific objective has not been fulfilled by all Contracting Governments. It is, therefore, recommended that this objective be

maintained in the Revised Regional Strategy, modified as necessary to take account of progress made to date.

#### B Requests addressed to the Secretariat (REMPEC)

e) The Centre engaged itself in assisting the Mediterranean countries to establish an appropriate legal framework for the transposition into national legislation of the provisions of the MARPOL Convention relevant to illicit discharges. An assessment of the situation with respect to MARPOL Annex I implementation was carried out in Mediterranean countries which are not EU member States.

Recent efforts of the Centre focused on enhancing the knowledge of legal personnel, prosecutors and magistrates and facilitating judicial co-operation and the establishment of possible common procedures, by organising a regional workshop (MEDEXPOL 2007) to discuss these issues. These efforts contributed to promote the creation of a network of prosecutors in the Mediterranean region, and resulted in the organisation of a Seminar on the enforcement of environmental legislation in the Mediterranean, by the Ministry of Justice of France, and the International Development Law Organisation (IDLO), which REMPEC attended.

Finally, in June 2013, REMPEC, in cooperation with Plan Bleu, organized a Meeting on the Establishment of a Network of Law Enforcement Officials relating to MARPOL in the Mediterranean Sea (MENELAS). The terms of reference of the proposed Network agreed to during this Meeting were subsequently adopted by the 18th Ordinary Meeting of the Contracting Parties of the Barcelona Convention.

**Recommendation 7 e)**: It is recommended that REMPEC continue providing support to Contracting Parties, in particular concerning regional and sub-regional cooperation and coordination in matters related to MARPOL enforcement and prosecution of offenders, including the follow-up to the establishment of the MENELAS.

## SPECIFIC OBJECTIVE 8 To reduce the pollution generated by pleasure craft activities

The Contracting Parties agree:

- a) that Guidelines on prevention of pollution from pleasure craft activities in the Mediterranean shall be prepared, once the Resolution containing the Principles to be taken into consideration for their development is adopted by the 14<sup>th</sup> Ordinary Meeting of the Contracting Parties scheduled for November 2005;
- b) to implement the relevant existing provisions of the MARPOL Convention and, once adopted, the Guidelines referred to in sub-paragraph a) above;
- c) to report to the Secretariat on the measures they undertook to implement the said Guidelines;

To request the Secretariat:

- d) to prepare, once the Resolution containing the Principles to be taken into consideration for the development of Guidelines is adopted by the Contracting Parties, and in close cooperation with IMO, the Guidelines referred to in subparagraph a) above;
- e) to submit, once finalised, the Guidelines referred to in sub-paragraph a) above the to the Contracting Parties for adoption at their 15<sup>th</sup> Ordinary Meeting;

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> f) to assist Mediterranean States in the implementation of the relevant provisions of the MARPOL Convention and, once adopted, of the Guidelines referred to in subparagraph a) above.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) The Guidelines on prevention of pollution from pleasure craft activities in the Mediterranean were adopted by the 15th Ordinary Meeting of the Parties in January 2008 and, thus, this sub-objective was accomplished.

b) Of the 17 Contracting Parties that replied to REMPEC's request for information, only one has reported the fulfilment of sub-objective 8 b). This may be due to the fact that compliance with this sub-objective, as drafted, depends on having previously implemented and adopted the relevant existing provisions of the MARPOL Convention. It may be argued that such dependence is not necessary, since the Guidelines are not a mandatory instrument like MARPOL.

c) No Contracting Government indicated having reported to the Secretariat on the measures they undertook to implement the said Guidelines.

**Recommendation 8 b & 8 c**: Contracting Parties that have not done so already should start implementing the Guidelines on prevention of pollution from pleasure craft activities in the Mediterranean as soon as possible, regardless of whether they have adopted or implemented the relevant existing provisions of the MARPOL Convention. This fact notwithstanding, the adoption and implementation of **all** MARPOL provisions should always be a priority for Contracting Parties. This specific objective should be redrafted to invite Contracting Parties to implement the Guidelines as soon as possible, requesting, where appropriate, REMPEC's assistance.

#### B Requests addressed to the Secretariat (REMPEC)

d) The above-mentioned Guidelines were proposed.

e) The above-mentioned Guidelines were submitted and endorsed by the 15th Ordinary Meeting of the Parties.

f) REMPEC did provide assistance upon request from a Mediterranean State.

**Recommendation 8 f)**: Although REMPEC fulfilled its mandate under this specific objective, It is recommended that the Centre continue to provide assistance to Contracting Parties that request it, taking into account the observations made under recommendation b) & c) above.

## SPECIFIC OBJECTIVE 9 Reduced risk of collisions by establishing Ship's Routeing Systems

The Contracting Parties agree:

a) to propose to IMO by 2008, where necessary, additional appropriate Routing Systems in the Mediterranean for possible adoption not later than 2010, in accordance with international law;

To request the Secretariat:

b) to ensure the identification of the main shipping lanes for vessels carrying oil and other hazardous and noxious substances (HNS) by 2007.

#### A Commitments of the Contracting Parties

a) With the exception of five EU member States and one non-EU member State, none of the other Contracting Parties that replied to REMPEC's request for information indicated that they had proposed to IMO additional appropriate routing systems in the Mediterranean. In the absence of further information, it could be argued that the latter have not found it necessary to propose additional routing measures.

**Recommendation 9 a)**: This specific objective may be kept in the Revised Regional Strategy, provided that the risk analysis identifies the need to establish additional routing systems in the Mediterranean.

#### B Requests addressed to the Secretariat (REMPEC)

b) REMPEC conducted this exercise through the SAFEMED Project (Study on Maritime Traffic Flows in the Mediterranean Sea) as well as through the MEDESS-4MS Project's WP4 activities gathering data for the risk analysis.

**Recommendation 9 b)**: REMPEC should continue playing a supporting role to Contracting Parties that so request, in particular if this specific objective is maintained in the Revised Regional Strategy, as remarked in recommendation a) above.

#### SPECIFIC OBJECTIVE 10 Improved control of maritime traffic

The Contracting Parties agree:

- a) to review the conditions for the transport of oil and other HNS in particular in single hull tankers with a view to consider the possibility of establishing by 2007 a Mediterranean regime in conformity with the international regulations;
- b) to identify by 2010 those areas of the Mediterranean where control of maritime traffic could be improved by the establishment of a regime based on the use of Automatic Identification System (AIS) in conjunction with Vessel Traffic Services (VTS) and mandatory reporting systems, and to complete approval procedures by 2010;
- c) to improve technical cooperation among VTS Centers of the neighbouring countries and according to the need, to exchange information about ships by using AIS system in the common surveillance area;

To request the Secretariat:

- d) to negotiate with appropriate organizations and agencies on behalf of Contracting Parties, which so request, the international financial assistance required to establish the regime referred to in sub-paragraph b) above by 2014;
- e) to develop a training programme for personnel involved in the transport and handling of HNS in conformity with the relevant IMO codes, in particular the IMDG Code by 2015.

#### A Commitments of the Contracting Parties

a) Few Contracting Parties (four out of 17, both EU and non-EU States) have reviewed the conditions for the transport of oil and HNS, as requested by sub-objective 10 a). Without such data, it will not be possible to establish the desired Mediterranean regime to enhance maritime safety and the protection of the marine environment in the Mediterranean against oil and HNS pollution. This situation is aggravated by the fact that the 2010 HNS Protocol is not yet in force. Conversely, the phasing-out of single-hull tankers should be a positive development in reducing the risk of accidents or pollution.

**Recommendation 10 a)**: Sub-objective 10 a) should be maintained, modified to include a request to Contracting Parties that have not done so already to consider ratifying the MARPOL Convention in its entirety and the 2010 HNS Protocol.

b) and c) Cooperation and coordination among neighbouring States in the control of maritime traffic is of paramount importance. Yet, less than half of the Contracting Parties that replied to REMPEC's request for information reported having taking action on this sub-objective. The establishment of a regime based on the use of Automatic Identification System (AIS) in conjunction with Vessel Traffic Services (VTS) and mandatory reporting systems has been proved successful in enhancing maritime safety and the protection of the marine environment in other parts of the world where oil and HNS is transported.

**Recommendation 10 b) & 10 c)**: These two sub-objectives should be maintained with an updated deadline for their fulfilment.

#### B Requests addressed to the Secretariat (REMPEC)

d) REMPEC has not been in a position to take action.

e) In the strictest sense of the wording of the sub-objective, REMPEC has not been in a position to take action. However, within the framework of the SAFEMED Project, REMPEC trained some 120 officials in vessel traffic management in accordance with the standards of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA). Besides, a SAFEMED II Project Regional Training Course on the 2010 HNS Protocol was organised by REMPEC in Malta in December 2012.

**Recommendation 10d) & 10 e)**: It is recommended that REMPEC be given the necessary mandate and resources, both human and financial, to accomplish these two sub-objectives, if kept in the Revised Regional Strategy. With regard to sub-objective 10 c), the Centre should endeavour to continue taking advantage of opportunities, as it did in the past (see the reporting in paragraph e) above), under other relevant projects and external activities.

#### SPECIFIC OBJECTIVE 11 Identification of Particularly Sensitive Sea Areas (PSSAs)

To request the Secretariat:

- a) to initiate, by 2007, the process of identification in conjunction with the appropriate MAP/RACs, of those areas which, on proposal by the Contracting Parties and after examination by the REMPEC Focal Points, could be proposed for designation as PSSAs;
- b) to assist, in co-operation with IMO, the Mediterranean coastal States which so request, to conduct the necessary relevant studies and to prepare the relative submissions to IMO for the designation of PSSAs, if any, in strict compliance with the relevant IMO Guidelines.

#### A Commitments of the Contracting Parties

Although this specific objective is not addressed directly to the Contracting Governments, the mandate given to REMPEC is conditional on Contracting Parties requesting the Centre to take action on the process of identification of potential PSSAs and to conduct studies and prepare submissions to IMO. In the absence of any such requests, it could be construed that the Contracting Parties do not feel that there is a need to establish PSSAs within the marine areas under their jurisdiction or that the protection afforded by the already designated Marine Protection Areas is sufficient for their needs. It should be borne in mind that only a PSSA can protect a particular marine area against international shipping activities through the application of mandatory Associated Protective Measures adopted by IMO, such as areas to be avoided, routing systems, mandatory reporting, etc.

**Recommendation 11**: Should the case be as remarked in the previous paragraph, it is recommended that this specific objective be incorporated in the Revised Regional Strategy, modified to include some Contracting Parties commitments, only if Parties deem it appropriate.

#### B Requests addressed to the Secretariat (REMPEC)

a) REMPEC has not been in a position to take action.

b) Since no such request was formulated by any State, REMPEC has not been in a position to take action.

**Recommendation 11 a) & b)**: The Centre should be ready to undertake the above requests should the Contracting Parties decide to keep the specific objective in the Revised Regional Strategy.

# SPECIFIC OBJECTIVE 12 To establish procedures for the designation of places of refuge in order to minimize the risks of widespread pollution

The Contracting Parties agree:

- a) to identify, as a matter of urgency, at the national level, by 2007, appropriate procedures as outlined in the relevant IMO Guidelines, in order to facilitate the decision making when designating a place of refuge for a ship in distress;
- b) that all Mediterranean States draw up plans to deal with ships in distress, including, appropriate equipment and means, as required, and define the modalities of the response according to its nature and to the risk incurred;

To request the Secretariat

c) to provide assistance to countries, which so request, to define procedures and draw up such plans.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) & b) A majority of the Contracting Parties that replied to REMPEC's request for information reported to have identified procedures to facilitate the decision making when designating a place of refuge and to have plans to deal with ships in distress, having had the assistance of

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REMPEC. It is hoped that, now that the Guidelines on the Decision-Making Process for Granting Access to a Place of Refuge for Ships in Need of Assistance, which were adopted by the Contracting Parties in January 2008, are available, the rest of the Parties that have not done so find it easier to comply with this specific objective.

**Recommendation 12 a) & b)**: The designation of places of refuge associated with national plans to deal with ships in distress are very valuable tools to protect the coastline against the devastating effects that a shipping accident occurring near the shore can have on the coastal environment of any State. It is, thus, recommended that this specific objective, modified as appropriate, be maintained in the Revised Regional Strategy until there is evidence that all the Contracting Parties have fulfilled the above sub-objectives.

#### B Requests addressed to the Secretariat (REMPEC)

c) REMPEC has prepared guidelines namely the Guidelines on the Decision-Making Process for Granting Access to a Place of Refuge for Ships in Need of Assistance, which were adopted by the 15th Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Almeria, Spain, January 2008). REMPEC also updated the Principles and Guidelines Concerning Cooperation and Mutual Assistance (RIS/A).

**Recommendation 12 c)**: Should the above recommendation a) & b) be accepted, REMPEC should continue providing assistance to Parties which so request in defining procedures for designating places of refuge and drawing up such plans to deal with ships in distress, with reference to the relevant Guidelines and Principles.

#### SPECIFIC OBJECTIVE 13 To examine the possibility of designating the Mediterranean Sea as a SOx emission control area under MARPOL Annex VI

The Contracting Parties agree:

a) to examine whether it is appropriate to submit to IMO, as from 2008, a proposal to designate the Mediterranean Sea as a SOx emission control area;

To request the Secretariat:

- b) to ensure the preparation, by 2007, of a study based on the input of Contracting Parties aimed at assessing the feasibility of the measure referred to in sub-paragraph a) above;
- c) to assist the Mediterranean coastal States which so request to prepare the relative submission to IMO related to the measure referred to in subparagraph a) above.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) Only one out of the 17 Contracting Parties that replied to REMPEC's request for information, reportedly supported by its neighbouring countries, had examined the appropriateness of submitting to IMO a proposal to designate the Mediterranean Sea as a SOx emission control area under MARPOL Annex VI. It should be noted that this reply referred only to a specific body of water and not to the Mediterranean as a whole and also that very few Contracting Parties have ratified MARPOL Annex VI. It is also known that another Contracting Party is seeking the designation of a specific part of its territorial sea as an emission control area, but

that it cannot do so due to the fact that not all the Mediterranean countries have ratified MARPOL Annex VI.

**Recommendation 13 a)**: As indicated in Recommendation 1 a), the ratification of MARPOL in general and of its Annex VI (1997 MARPOL Protocol) in particular should be a priority for Contracting Parties. Further, the revised Annex VI introduces much more stringent requirements regarding sulphur content of fuel in SOx emission control areas. Therefore, considering that it may take some time for all the Contracting Parties to ratify MARPOL Annex VI and that to impose the new Annex VI strict regime in the whole of the Mediterranean Sea may not be a realistic goal if it is to be achieved within the period of the Revised Regional Strategy (2016 – 2021), it is recommended that this specific objective be maintained in the Revised Regional Strategy, but modified to, instead, reflect the need to examine the possibility of designating certain specific areas within the Mediterranean Sea, which satisfy the provisions of the applicable IMO guidelines, as SOx Emission Control Areas.

#### B Requests addressed to the Secretariat (REMPEC)

b) REMPEC has not been in a position to take action as very few Contracting Parties ratified MARPOL Annex VI, and because there was also a lack of financial resources.

c) Reference is made to the relevant actions by the Contracting Parties.

**Recommendation 13 b) & c)**: It is recommended that REMPEC continue providing Mediterranean coastal States which so request with advice and assistance in the process of ratifying MARPOL Annex VI and of preparing possible proposals for the designation of certain sea areas under their jurisdiction as emission control areas.

# SPECIFIC OBJECTIVE 14 To ensure that adequate emergency towing capacity is available throughout the Mediterranean to assist vessels, including tankers, in distress

The Contracting Parties agree:

a) to adopt, by 2011, Mediterranean guidelines on emergency towing including, if appropriate, agreements on sharing towing capacity between neighbouring States.

To request the Secretariat:

b) to evaluate, by 2009, the capacity, number and location of tugs throughout Mediterranean ports.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) Although at the time of reporting, only three of the 17 Contracting Parties that replied to REMPEC's request for information had indicated compliance with this specific objective, it is known that there are at least three regional agreements on search and rescue, one in the West Mediterranean and two in the North-West Mediterranean, which include the sharing of towing capacity. The fact remains, though, that this specific objective first calls for the adoption of "Mediterranean guidelines on emergency towing", which could be deemed to mean the "Emergency Towing Arrangements in the Mediterranean Sea", prepared by REMPEC under the SAFEMED Project.

**Recommendation 14 a)**: The provision of adequate emergency towing capacity to assist ships in distress in the Mediterranean, especially when there are sharing

agreements among neighbouring coastal States, is of paramount importance when trying to avert major loss of life and/or serious pollution damage. Therefore, this specific objective should be kept in the Revised Regional Strategy, modified to emphasize the advantages of sharing specialized human resources and equipment in distress situations and to encourage Contracting Parties that have not done so already to consider entering into agreements with neighbouring coastal States to that end.

#### B Requests addressed to the Secretariat (REMPEC)

b) REMPEC assessed the capacity, number and location of tugs throughout Mediterranean ports through SAFEMED I Project's Task 3.3 finalised in April 2009 with regard to Emergency Towing Arrangements in the Mediterranean Sea.

**Recommendation 14 b)**: Although REMPEC may be deemed to have fulfilled its mandate under this request, if the Contracting Parties decide to maintain sub-objective 14 a) in the Revised Regional Strategy the Centre should continue to provide assistance in drawing agreements on sharing towing capacity to Contracting Parties that so request and to keep a periodical check on the capacity, number and location of tugs throughout Mediterranean ports.

# SPECIFIC OBJECTIVE 15 Prevention of accidents in commercial ports and oil terminals

The Contracting Parties agree:

- a) to prepare and adopt, by 2015, a comprehensive Marine Pollution Safety Management System for use in commercial ports and oil terminals comprising procedures, personnel training and equipment requirements;
- b) that all Mediterranean States report as from 2015 on the measures taken to implement the Marine Pollution Safety Management System;

To request the Secretariat:

- c) to evaluate, by 2010, the capacities in terms of safety of the Mediterranean commercial ports and oil terminals;
- d) to prepare technical guidelines on the implementation of the Marine Pollution Safety Management System and to circulate these to the Contracting Parties.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) & b) Of the 17 Contracting Parties that replied to REMPEC's request for information, seven reported that they had prepared and adopted a comprehensive Marine Pollution Safety Management System for use in commercial ports and oil terminals, but only one of these had started reporting on the measures taken to implement such system.

**Recommendation 15 a) & b)**: Since the deadline for completion of this specific objective has not yet passed and acknowledging that a number of Contracting Parties may be in the process of preparing a Marine Pollution Safety Management System, it is recommended that this specific objective be maintained in the Revised Regional Strategy with a completion date extended to 2017.

#### B Requests addressed to the Secretariat (REMPEC)

c) and d) REMPEC has not been in a position to take action.

**Recommendation 15 c) & d)**: The Centre, due to the lack of input from Parties and of the necessary means and resources, has been unable to fulfil its mandate under this specific objective. It is recommended that the mandate be kept in the Revised Regional Strategy, with an appropriate deadline extension, considering that the preparation of the technical guidelines mentioned in sub-objective 15 d) will not be possible until a sufficient number of Contracting Parties have accomplished sub-objectives 15 a) and 15 b).

# SPECIFIC OBJECTIVE 16 To enhance the levels of pre-positioned spill response equipment under the direct control of Mediterranean States

The Contracting Parties agree:

- a) to provide REMPEC by 2006 with detailed information concerning their respective national practices for financing the acquisition of spill response equipment, including in particular information concerning functioning of any existing funds specifically dedicated inter alia to marine pollution preparedness and response activities;
- b) to establish by 2010 national stockpiles of State controlled pre-positioned spill response equipment;

To request the Secretariat:

- c) to provide assistance to the States which so request in identifying the minimum required level of pre-positioned State controlled spill response equipment;
- d) to disseminate to the Contracting Parties the information concerning the applicable ways of financing the acquisition of such equipment.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) Only five out of the 17 Contracting Parties that replied to REMPEC's request for information reported compliance with this sub-objective.

b) Conversely, most of the same Parties indicated that they had established national stockpiles of State controlled pre-positioned spill response equipment.

**Recommendation 16 a) & b)**: Sharing information on ways of financing spill response equipment is important, especially for coastal States which may lack the considerable funds needed to purchase and maintain adequate equipment of that nature. Since marine pollution preparedness and response should represent an unremitting concern for all coastal States and being aware of the difficulties encountered by some States when trying to finance expensive and at times perishable oil response equipment, it is recommended that this specific objective be kept in the Revised Regional Strategy, with appropriately modified deadlines.

#### B Requests addressed to the Secretariat (REMPEC)

c) No specific requests were received. However, REMPEC conducted actions regarding this sub-objective, by creating Country Profiles pages on its website which include an inventory of equipment, as well as through the revision and update of the MEDESS-4MS Project data and in the framework of the revision of National Contingency Plans.

d) REMPEC has not been in a position to take action.

**Recommendation 16 c) & d)**: If the Contracting Parties decide to keep this specific objective, the Centre should be requested to keep updated the equipment inventories in the Country Profiles and provide the assistance and disseminate the information referred to in sub-objectives 16 c) and d).

#### SPECIFIC OBJECTIVE 17 To encourage the participation of the regional scientific and technical institutions in research and development activities and to facilitate transfer of technology

The Contracting Parties agree:

- a) to encourage their respective scientific and technical institutions, as well as the industry, to actively participate in R&D activities and programmes related to accidental marine pollution prevention, preparedness and response;
- b) to encourage their respective national institutions and industry to present the results of their R&D activities and programmes in international fora;

To request the Secretariat:

- c) to assist regional institutions and industry in identifying fields of research in which there is a need for enhancement of the state-of-the-art of spill preparedness and response technologies and techniques;
- d) to facilitate dissemination and exchange of results of national R&D activities and programmes within and outside the Mediterranean region;
- e) to facilitate the participation of national and regional research institutions and industry in the relevant international fora with a view to making better known the results of R&D activities undertaken in the Mediterranean region.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) & b) Only a few (four for a) and five for b) out of 17) Contracting Parties that replied to REMPEC's request for information complied with the commitments under sub-objectives 17 a) and 17 b) above.

**Recommendation 17 a) & b)**: Encouraging institutions and the industry to actively participate in OPRC R&D activities and programmes and to present the results at international for should not represent an undue burden to Administrations, while the States concerned would accrue benefits from the outcome of such activities and programmes. Therefore, it is recommended that this specific objective be kept in the Revised Regional Strategy. Further, Contracting Parties should be encouraged to report on R&D activities using the page created by REMPEC within the Country Profiles website.

#### B Requests addressed to the Secretariat (REMPEC)

c) REMPEC is involved in the MEDESS-4MS Project, which is dedicated to the strengthening of maritime safety by mitigating the risks and impacts associated to oil spills. Besides, REMPEC signed a Memorandum of Understanding with the Mediterranean Operational Oceanography Network (MOON) regarding Emergency Response Collaboration Agreement for the Mediterranean Region. Finally, despite not receiving any specific questions from the Contracting

Parties on this matter, REMPEC, through the MTWG, intended addressing questions regarding bioremediation.

d) REMPEC participated in the GloBallast Project Global Task Force Meetings and Research and Development Fora, as well as, regional activities organised by other Regional Seas Programmes during which the Centre shared its experience in implementing the GloBallast Project in the Mediterranean. On issues related to preparedness and response, the Centre has also participated in several regional workshops, giving an overview of the situation in the Mediterranean Sea. REMPEC created a page on its website Country Profile pages were countries could report on Research and Development activities.

e) REMPEC fulfils this sub-objective by taking part in projects such as MEDESS-4MS or GloBallast.

**Recommendation 17 c) to e)**: Although the mandate of REMPEC under sub-objectives 17 c) to e) may be deemed accomplished, it is recommended that this assignments be maintained in the Revised Regional Strategy, considering that new R&D activities and programmes within and outside the Mediterranean region will continue to emerge and that the results and outcome of such activities and programmes, either new or existing, will be of great value to national Administrations when programming R&D activities relating to accidental marine pollution prevention, preparedness and response.

# SPECIFIC OBJECTIVE 18 To improve the quality, speed and effectiveness of decision-making process in case of marine pollution incidents through development and introduction of technical and decision support tools

The Contracting Parties agree:

- a) to facilitate the development of specific regional decision support tools through active participation of their national scientific institution and programmes, and through providing by 2007 relevant data-sets and other information that might be available in their respective countries;
- b) to cooperate with a view to selecting the most appropriate oil spill forecasting model that could be used by all Mediterranean coastal States, and to adapt such model for use in the waters under their respective jurisdictions;

To request the Secretariat:

c) to regularly revise and upgrade the existing and to develop and make available to the competent national authorities of the Contracting Parties new IT based decision support tools, including in particular sensitivity maps, spill forecasting models and databases, taking into account national or regional initiatives in this field.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) Few (five out of 17) of the Contracting Parties that replied to REMPEC's request for information had facilitated the development of specific regional decision support tools, despite the fact that an agile and effective decision-making procedure is and indispensable tool that a coastal State need to have available when faced with a marine pollution incident off its shoreline.

**Recommendation 18 a)**: Contracting Parties that have not done so already should endeavour to undertake the actions outlined in this sub-objective. It should be borne in mind that the failure of a coastal State in taking swift and effective action against the imminence of a serious marine pollution incident occurring in its territorial waters may result, not only in a national environmental disaster, but also in causing devastation along neighbouring countries' shores. This sub-objective should, therefore, be maintained in the Revised Regional Strategy.

b) The Project Mediterranean Decision Support System for Marine Safety (MEDESS-4MS) involving partners from seven Mediterranean coastal States will provide a tool enabling all Mediterranean countries to compare the most appropriate oil spill forecasting models for a selected area in the region. In addition, oceano-meteorogical centres from six Mediterranean countries have signed an agreement with REMPEC through the Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS-Former MOON) providing, on request, oil spill forecast to all Mediterranean countries. This sub-objective attracted six positive replies out of the total of 17. Despite this encouraging response, it is felt that the participation of all Mediterranean countries in the maintenance of the Mediterranean-wide **common** oil spill forecasting model (MEDESS-4MS) would enable Contracting Parties throughout the region to greatly increase the effectiveness of their response to serious pollution incidents.

**Recommendation 18 b)**: It is recommended to maintain the Sub-objective 18 b) in the Revised Regional Strategy, and to amend it to invite all Mediterranean coastal States to participate in MONGOOS (former MOON) and to contribute to the sustainability of the system developed under MEDESS-4MS.

#### B Requests addressed to the Secretariat (REMPEC)

- c) REMPEC developed and/or updated the following tools:
  - a Geographic Information System (GIS) on Maritime Traffic in the Mediterranean Sea;
  - Maritime Integrated Decision Support Information System on Transport of Chemical Substances (MIDSIS-TROCS);
  - Waste Management Decision Support Tool;
  - Other long-implemented tools are being continually updated, such as the REMPEC Alerts and Accidents Database.
  - REMPEC is currently working on the MEDESS-4MS Project, which will help in the decision making process and provide several forecasting models through a unique platform.
  - Finally, the REMPEC website Country Profile as well as the RIS are being updated by REMPEC. REMPEC made the Regional Information System (RIS) electronically available as opposed to the previously paper based version during the 2009-2011 period. REMPEC then revised the RIS reference, its content, and format during the following biennium.

**Recommendation 18 c)**: Although REMPEC has been rather active in discharging its mandate under this sub-objective, as evidenced by the actions enumerated above, should the Contracting Parties accept Recommendations a) and b), the requests in sub-objective 18 c) should be maintained in the Revised Regional Strategy, modified as necessary.

#### SPECIFIC OBJECTIVE 19 To increase as much as practical, the level of knowledge in the field of preparedness and response to accidental marine pollution by oil and other harmful substances

The Contracting Parties agree:

 a) to establish by 2008, national training programmes for response to incidents involving oil and other HNS, based in particular on IMO OPRC Model training courses Levels 1 and 2, for training national operating level and supervisory personnel respectively, with a view to ensuring a continuous education of such personnel;

To request the Secretariat:

- b) to prepare and insert into the regional training programme the "Training of Trainers" courses, based in particular on the work carried by IMO OPRC / OPRC-HNS Technical Group;
- c) to focus regional training courses on specific, highly specialized issues, to be identified at regular basis by the Meetings of REMPEC Focal Points;
- d) to take into consideration, when preparing training programmes for the Mediterranean region, the relevant model training courses that might be developed in the future by IMO OPRC / OPRC-HNS Technical Group.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) At the time of preparing the present report, half of the 17 Contracting Parties that replied to REMPEC's request for information had reported the establishment of national training programmes for response to incidents involving oil and other HNS, based in particular on IMO OPRC Model training courses Levels 1 and 2. Since the long-term aim of this objective is to ensure the continuous education and training of national operating level and supervisory personnel, this activity should be considered as non-ending.

**Recommendation 19 a)**: Considering that the maintenance of well-trained and everready response personnel should be a priority for coastal States, it is recommended that Contracting Parties that have not yet done so endeavor to establish and keep updated national training programmes for response to incidents involving oil and other HNS and that the Parties that have such programmes already in place subject them to updating on a regular basis. Sub-objective 19 a) should, therefore, be kept in the Revised Regional Strategy, amended if considered appropriate.

#### **B** Requests addressed to the Secretariat (REMPEC)

REMPEC regularly organises training courses covering different subjects and targeting the widest variety of participants at the greatest extent possible. For instance, a Course on Oil Spill Waste Management was organised in Israel in September 2011. The latter was repeated in Tunisia in May 2012. The Centre also participates in exercises such as the EURONYME 2009, SIMULEX June 2010 and MALTEX 2010.

REMPEC organises information and other Decision-Making meetings. For instance, REMPEC has been organising various meetings regarding the Offshore Protocol to the Barcelona Convention. Several MEDEXPOL Meetings were also organised. In particular:

b) REMPEC initiated and completed the POSOW Project, including a train the trainer course and the development of the related pedagogic material (Power Point presentations, posters, instructions manual). c) REMPEC regularly organised regional training courses on highly specialised issues such as MEDEXPOL workshops.

d) REMPEC regularly organises trainings on specific issues such as the use of dispersants, waste management, oiled shoreline assessment, etc...

e) REMPEC has taken into consideration relevant model training courses when preparing its training programme.

**Recommendation 19 b) to d)**: It is widely acknowledged that REMPEC has excelled at providing support and developing training and other material for the benefit of Contracting Parties. In this line, and since the subject of pollution preparedness and response should be a continuous concern for Administrations, it is recommended that the Centre carry on preparing and updating OPRC/OPRC-HNS national and regional training programmes and courses, as may become necessary. These three subobjectives, therefore, should be kept in the Revised Regional Strategy, modified as appropriate.

# SPECIFIC OBJECTIVE 20 To reguidel

To revise the existing recommendations, principles and guidelines, and to develop new ones aimed at facilitating international co-operation and mutual assistance within the framework of the Prevention and Emergency Protocol

The Contracting Parties agree:

- a) to review by 2007 the existing recommendations, principles and guidelines concerning accidental marine pollution preparedness, response and mutual assistance, as well as prevention of pollution from ships, that were adopted since 1987, paying particular attention to those that aim at removing possible obstacles which might hinder mutual assistance;
- *b)* to identify by 2007 all such recommendations, principles and guidelines that need to be revised, updated and/or amended;
- c) to indicate by 2008 which additional recommendations, principles and guidelines should be adopted at the regional level with a view to facilitating the implementation of the Prevention and Emergency Protocol in the field of international co-operation and mutual assistance;
- d) to further facilitate mutual assistance by streamlining by 2010 their respective national procedures for entry into, movement within and exit from their territory of specialized personnel and equipment that might be required in case of emergency;

To request the Secretariat:

- e) to compile by 2009 an inventory of their applicable national procedures governing the entry into, movement within and exit from their territory of specialized personnel and equipment that might be provided as mutual assistance in case of emergency, and to prepare recommendations for improving those national procedures that could seriously hamper providing such assistance;
- f) to prepare by 2015, in co-operation with REMPEC national Focal Points, and to propose for adoption to the Meetings of the Contracting Parties revised, updated and/or amended texts of the existing regional recommendations, principles and guidelines;

g) to develop by 2015, in co-operation with REMPEC national Focal Points, and to propose for adoption to the Meetings of the Contracting Parties, new recommendations, principles and guidelines, as necessary.

#### Assessment of compliance with the implementation goals

#### A Commitments of the Contracting Parties

a) to c) Less than half of the Contracting Parties that replied to REMPEC's request for information reported compliance with the tasks of reviewing their existing recommendations, principles and guidelines concerning accidental marine pollution preparedness, response and mutual assistance, as well as prevention of pollution from ships; of identifying all such recommendations, principles and guidelines that need to be revised, updated and/or amended; and indicating which additional recommendations, principles and guidelines should be adopted at the regional level with a view to facilitating the implementation of the Prevention and Emergency Protocol in the field of international co-operation and mutual assistance.

**Recommendation 20 a) to c)**: The tasks under sub-objectives a) to c) above are of an administrative nature and their accomplishment should not require an inordinate amount of resources. It is, thus, recommended that Contracting Parties that have not done so already endeavour to take action, as soon as practicable, as specified in sub-objectives 20 a) to c). These three sub-objectives should, therefore, be maintained in the Revised Regional Strategy, with revised but reasonably tight deadlines.

d) Only one third of the 17 Contracting Parties that replied to REMPEC's request for information stated that they had facilitated mutual assistance by streamlining their respective national procedures for entry into, movement within and exit from their territory of specialized personnel and equipment that might be required in case of emergency.

**Recommendation 20 d)**: The facilitation of transboundary movement of specialized response personnel and equipment in cases of emergency may mark the difference between success and failure in responding to, and mitigating, the often disastrous consequences of a serious pollution incident. It is, therefore, recommended that Contracting Parties that have not yet done so, undertake to streamline their respective national procedures for entry into, movement within and exit from their territory of specialized personnel and equipment that might be required in case of emergency. To do so the related adopted Principles and Guidelines should be considered as well as the IMO Guidelines on International Offer of Assistance. Sub-objective 20 d) should, therefore be maintained in the Revised Regional Strategy, with a revised but reasonably tight deadline.

#### **B** Requests addressed to the Secretariat (REMPEC)

e) REMPEC tried to list in its website Country Profile the existing transboundary arrangements when the States provided the information. The information can be found in the "Transboundary arrangements" table, in the "OPRC: Expertise and equipment available and measures in place for transboundary exchange" section. Unfortunately, very limited information was provided.

**Recommendation 20 e)**: Considering that not all the Contracting Parties have furnished information relating to their existing transboundary arrangements for mutual assistance in cases of emergency, it is recommended that the requests contained in sub-objective 20 e) be kept until all the necessary information is at hand.

f) REMPEC revised the existing guidelines and produced new ones which were adopted. REMPEC constantly works in developing and making information available as much as possible. For instance, REMPEC elaborated as well as translated the following:

• the Guidelines for the Use of Dispersants for Combating oil Pollution at Sea in the Mediterranean Region, translated into French;

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- the Guidelines for Oil Spill Waste Management, translated into French; and
- the Mediterranean Guidelines on oiled Shoreline Assessment, translated into Spanish and Arabic.

All the Guidelines produced by REMPEC were reformatted to harmonize the Centre's guidelines and were uploaded on the Centre's online Regional Information System. REMPEC also supported the elaboration of international guidelines through the IMO OPRC/HNS Group, for example those related to sunken oil. Besides, it contributed to the elaboration of the Guidelines on international offers of assistance.

g) As a result of the lessons learnt from the 2006 Lebanese incident, the following Guidelines were developed in the framework of the MTWG:

- the Guidelines for Oil Spill Waste Management; and
- the Mediterranean Guidelines on oiled Shoreline Assessment.

**Recommendation f) & g)**: The mandate to prepare and develop, in co-operation with REMPEC national Focal Points, revised, updated and/or amended texts of the existing regional recommendations, principles and guidelines concerning accidental marine pollution preparedness, response and mutual assistance, as well as prevention of pollution from ships, should be maintained, pending receipt by the Centre of the necessary input from Contracting Parties. Thereafter, the Centre should propose to the appropriate Meetings of the Contracting Parties the revised, updated or amended new recommendations, principles and guidelines for adoption. Sub-objectives f) and g) should, therefore, be kept in the Revised Regional Strategy, with a suitably revised deadline.

# SPECIFIC OBJECTIVE 21 To strengthen the capacity of individual coastal States to respond efficiently to marine pollution incidents through development of sub-regional operational agreements and contingency plans

The Contracting Parties agree:

- a) to prepare and adopt, if that has not yet been done, national contingency plans and to establish national systems for preparedness and response, at latest by 2008, with a view to creating necessary conditions for development of sub-regional agreements;
- b) to negotiate and endeavour to conclude by 2015 sub-regional agreements covering the entire Mediterranean region;

To request the Secretariat:

- c) to continue assisting the Contracting Parties, which did not yet adopt their national contingency plans, in the development and implementation of their national preparedness and response systems;
- d) to assist Contracting Parties, which so request, in preparing sub-regional contingency plans and in drafting agreements on their implementation.

# Assessment of compliance with the implementation goals, as stipulated in Annex 1 of the 2005 Regional Strategy

#### A Commitments of the Contracting Parties

a) A clear majority of the 17 Contracting Parties that replied to REMPEC's request for information indicated that they had fulfilled sub-objective 21 a). However, there are still a

number of Parties that lack a national contingency plan and/or a preparedness and response system.

**Recommendation 21 a)**: Since the said plan and system are fundamental protection requirements against the potentially disastrous consequences of a serious pollution incident, it is recommended that this sub-objective be kept in the Revised Regional Strategy until all the Contracting Parties have adopted a national contingency plan and have established a national system for preparedness and response, with a view to creating the necessary conditions leading to the development of sub-regional agreements. It is also recommended that this sub-objective be given priority by the Parties that have not yet accomplished it.

b) Seven of the 17 Parties that replied had taken action on sub-objective 21 b). However, the deadline for completion of this task is 2015 and it is hoped that a larger number of coastal States are considering the conclusion of sub-regional agreements with neighbouring countries.

**Recommendation 21 b)**: The importance of mutual assistance and international cooperation, including the provision of technical support and equipment for the purpose of responding to an oil or HNS pollution incident, in enshrined in the OPRC Convention and the OPRC/HNS Protocol, and is also widely recognized. It is, therefore, recommended that sub-objective 21 b) be kept in the Revised Regional Strategy, with a revised deadline, which should be contingent on the accomplishment of sub-objective 21 a).

#### B Requests addressed to the Secretariat (REMPEC)

c) REMPEC assisted Albania and Montenegro in the development of their National Contingency Plan. Albania adopted its Plan on July 25th 2012, whilst Montenegro adopted it on 28 May 2011. REMPEC assisted Cyprus and Malta in the revisions of their plans, while Turkey successfully adopted its National Contingency Plan (September. 29th, 2011).

REMPEC offered its assistance to the three countries remaining without any operational national contingency plan namely Bosnia and Herzegovina, Libya and Lebanon.

d) REMPEC assisted countries in establishing the following agreements:

- Sub-regional Contingency Plan for the south-western Mediterranean and the relevant Agreement Algeria Tunisia Morocco in force since 19 May 2011
- Agreement between Algeria, Morocco and Tunisia concerning the Sub-Regional Contingency Plan for Preparedness for and Response to Accidental Marine Pollution in the South-Western Mediterranean Not yet in force.

During the Adriatic Spill Conference on spill prevention, preparedness and response (ADRIASPILLCON 2013, Opatija, Croatia, May 2013), Albania, Bosnia, and Herzegovina and Montenegro expressed their interest in further cooperating through the current Sub-Regional Contingency Plan for prevention of, preparedness for and response to major marine pollution incidents in the Adriatic Sea.

REMPEC continued its support for the maintenance, update and implementation of the Agreement concerning the Sub-Regional Contingency Plan for the South-Western Mediterranean which was signed in Algiers, on 20 June 2005. The Agreement and the Plan entered into force on 19 May 2011.

The Centre also contributed in the update of the Annex of the Agreement on the Sub-Regional Contingency Plan for Prevention of, Preparedness for and Response to Major Marine Pollution Incidents in the Adriatic Sea (2005) in between Croatia, Italy and Slovenia.

REMPEC assisted in the implementation of the POSOW Project, involving Croatia, Cyprus, France, Greece, Italy, Malta, Slovenia and Spain and aiming at establishing a regional

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cooperation synergy through the enhancement of knowledge and capacities of operators, professionals and volunteers in the field of marine pollution.

**Recommendation 21 c & d)**: Although it is evident that the Centre has dedicated much effort and resources to continue assisting the Contracting Parties in the development and implementation of their national preparedness and response systems and in preparing sub-regional contingency plans and agreements on their implementation, this being one of the core mandates of REMPEC, there is still work pending on the part of some Contracting Parties. It is, thus, recommended that the mandate in sub-objectives 21 c) and d) be kept until **all** the Contracting Parties have in place adequate national contingency plans and preparedness and response systems and have concluded sub-regional agreements covering the entire Mediterranean region.

\* \* \*

#### REMPEC/WG.36/4 Annex 2

#### ANNEX 2

									Contracting	g Parties									
Sp. Obj.	1	2	3	4	5	6	6	7	8	9	10	11	12	13	14	15	16	17	% Yes
SO1a	×	×	×	×	V		$\checkmark$	×	×		×	V	$\mathbf{\overline{\mathbf{A}}}$	×	×		$\checkmark$	×	41.2
SO1b	$\checkmark$	0	V	×	×				V		×	V				V	V	×	70.6
SO2a		V	-		×		$\checkmark$	0	×	-	×			0	0		V		52.9
SO2b		×	-	×	-		$\checkmark$	×	×	-	×		$\mathbf{\nabla}$	0	-	$\checkmark$		×	35.3
SO3a		$\checkmark$	0	N/A	N/A			N/A	×	N/A	N/A		N/A			N/A	N/A	-	35.3
SO4a	0	0				×	×	×	×	-	×			0	-		$\checkmark$	0	41.2
SO4b-i										-	×			-	0			0	70.6
SO4b-ii										-	×			0	0			0	70.6
SO4c-i		$\checkmark$	0	0				×	0	-	×			0	0			0	47.1
SO4d-i	×	×	×	×		×	×	×	0	-	×		0	-	0			0	23.5
SO4e-i	×		V					×	0	-	×	$\checkmark$		-	0		V	0	52.9
SO4f-1	×	×	×	×	×	×	×	×	0	-	×	0		-	×		×	0	11.8
SO4f-ii	×		×	0	×	×	×	×	0	-	×	0		-	0		×	0	17.6
SO5a			×	×	×			×	×	-	×				-				52.9
SO5b	×		×					×	0	-	X			0	-				52.9
SO6a	-	X	×	O X	<b>▼</b>	√ ×	▼	×	0	-	×	<ul> <li>✓</li> <li>×</li> </ul>	▼		×	<ul><li>✓</li></ul>	×		41.2
SO6b SO7a	-	× ✓	-	0	×		×	× ✓	0	-	×	× ✓	×	0	0	⊻		-	17.6 58.8
SO7a SO7b	×	×	-	×	×	×	×	×	×	-	×		0	0	0	⊻	×	-	23.5
SO76		×	×	×	×	0	0	×	0	-	×	0	U ☑	0	×	V		-	23.5
		0	×	×	I ×	×	×	×	×	-	I X	 ✓	0	0	-	×		-	17.6
SO8a	×	0	×	×	-	×	×	N/A	0	_	X	-	0	-	0		×	-	5.9
SO8b	×	×	×	×	×	×	×	N/A	0	-	×	-	0	-	-		×	-	5.9
SO9a	-	×	×	×				×	×	$\checkmark$	×	-	-	$\checkmark$	0		☑	-	35.3
SO10a		×	×	0	0	×	×	×	0	-	×		-		0		×	-	23.5
SO10b	0	$\checkmark$	×	0	0	×	×	0	×		×		0	0		$\checkmark$	$\checkmark$		41.2
SO10c	0	×	×	V	0	×	×	×	×		×	$\checkmark$	0	V	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	47.1
SO11							•		Secretaria	ťs Duty									
SO12a		0	$\checkmark$	×	V	$\checkmark$	$\checkmark$	×	×		×	$\checkmark$		×	×	$\checkmark$	$\checkmark$		58.8
SO13a	×	0	×	0		×	×	×	×	-	×	-	-	×	-	-	×	-	5.9
SO14a	×	×	×	×	×	×	×		0		×	-	-	V	0	-	×	-	17.6
SO15a	V	×		0	V	×	×	×	0		×		0		0		×	-	41.2
SO15b	0	×	-	×	×	×	×	×	×	-	×		0	0	-	-	×	-	5.9
SO16a		×		0	×	×	×	0	×	-	×		0	×			×	-	29.4
SO16b		×	V				V	×	V		×			V	V	×		-	70.6
SO17a	-	-	×	×	×	×	×	×	×		×			0	-	-		-	23.5
SO17b	×	-	×	×	×	×	×	×	×		×			0	-			-	29.4
SO18a	-	-	×	0	×	×	×	×	0		×			0	$\checkmark$	×		-	29.4
SO18b		0	×	0	×			×	×		×			0	-	×		-	35.3
SO19a			×	0		0	0	×	0		×			0				-	52.9
SO20a		×			×	0	0	×	0	V	X		-	×	0				47.1
SO20b	-	0		×	×			×	×	-	×			0	0			-	35.3
SO21a		×		0				0			X			0				-	64.7
SO21b	-	×	<b>⊻</b>	0	M		$\checkmark$	×	0	$\checkmark$	×	-	×		V	$\checkmark$	×	-	41.2

🗹 = Yes

O = Other

🗵 = No

- = No Answer

N/A = Not Applicable