

31 May 2024

Subject: Request for Quotations for the Provision of Consultancy Services for the Preparation of a Study analysing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean Region

Dear Sir/Madam

The Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) is a Regional Activity Centre established within the framework of the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP), also referred to as UNEP/MAP, with a view to coordinating the activities of the Mediterranean coastal States related to the implementation 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") to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (the "Barcelona Convention"). The Centre is based in Malta, hosted by the Maltese Government, and is administered by the International Maritime Organization (IMO) in cooperation with UNEP/MAP.

REMPEC would like to procure the Consultancy Services for the Preparation of a Study analysing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean Region. The duration of the contract shall be until 2 December 2024. Details of requirements are as per the attached Request for Quotations.

You are invited to submit your quote as per the attached Request for Quotations to procurement@rempec.org, by not later than **Friday, 14 June 2024 – midnight (Malta local time or UTC+2 hour)**. Late or incomplete submissions will not be considered. All prices submitted are to be exclusive of VAT.

Questions regarding this Request for Quotations should be addressed to procurement@rempec.org by not later than **Friday, 7 June 2024 – 1700hrs (Malta local time or UTC+2 hour)**. REMPEC will reply to any request for additional information in strict compliance with the equal treatment principle. Provided that they have reached REMPEC before the abovementioned deadline, requests will be answered by e-mail.

The REMPEC Procurement Selection Committee will open the bids and proceed with the selection of the 'lowest-priced, technically acceptable offer' and will communicate the results in due time.

Yours sincerely,



Ivan Sammut
Head of Office
REMPEC



REQUEST FOR QUOTATIONS FOR THE PROVISION OF CONSULTANCY SERVICES
FOR THE PREPARATION OF A STUDY ANALYSING THE IMPACT OF BIOFOULING ON
THE ENERGY EFFICIENCY OF SHIPS AND THE GHG ABATEMENT POTENTIAL OF
BIOFOULING MANAGEMENT MEASURES IN THE MEDITERRANEAN REGION

Issued by: Regional Marine Pollution Emergency Response Centre for the Mediterranean
Sea (REMPEC)

RfQ: REM_Quote 10/2024

Issue Date: 31 May 2024

Submission Date and Time: 14 June 2024 – midnight (Malta local time or UTC+2 hour)

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SECTION A: INSTRUCTIONS

- 1 Response to this Request for Quotations (RfQ) is to be submitted on procurement@rempec.org. All submissions will be dealt with in strictest confidence.
- 2 This RfQ will be awarded based on the 'lowest-priced, technically acceptable offer' evaluation methodology.
- 3 The list of criteria for the analysis of the quotations are set out in the enclosed List of Criteria.

SECTION B: GENERAL INFORMATION

Purpose

4 The purpose of this RfQ is for the provision of consultancy services for the preparation of a Study analysing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean region.

Beneficiary

5 The Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) is a Regional Activity Centre established within the framework of the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP), also referred to as UNEP/MAP, with a view to coordinating the activities of the Mediterranean coastal States related to the implementation 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”) to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (the “Barcelona Convention”). The Centre is based in Malta, hosted by the Maltese Government, and is administered by the International Maritime Organization (IMO) in cooperation with UNEP/MAP.

6 The beneficiary, being REMPEC, is the point of contact for this RfQ. Any communications at tendering stage shall be made on procurement@rempec.org.

7 Any clarification questions are to reach REMPEC by not later than 7 June 2024 at 1700hrs (Malta local time or UTC+2 hour). Clarifications requests are to be sent on procurement@rempec.org.

Scope and Terms & Conditions

Scope

8 The objective of this RfQ is to obtain competitive quotations from qualified and eligible companies for providing consultancy services for the preparation of a Study analysing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean region, in accordance with the enclosed Terms of Reference (the “Terms of Reference”).

Terms & Conditions

9 In submitting a quotation, the bidder accepts in full and without restriction the requirements of this RfQ including the Terms of Reference and the IMO General Terms and Conditions as the sole basis of this tender process, and waives his own conditions of sale, whatever they may be.

SECTION C: DETAILS OF INFORMATION REQUESTED

Specific Project Overview

10 Technical specifications, including Background, Objectives, Assignment, Geographical scope of the assignment, Reporting, and Schedule, are as set out in the Terms of Reference.

11 Bidder should submit a technical proposal that offers a solution to the requirements specified in the Terms of Reference.

12 Bidder should also submit a financial proposal indicating all costs that the bidder will charge in carrying out the technical proposal.

Project deliverables

13 The successful bidder is expected to produce the following deliverables:

Title	Detailed description
Draft kick-off Meeting summary and workplan	as per paragraph 10.2 of the Terms of Reference
Draft Study	as per paragraph 10.3 of the Terms of Reference
Revised draft Study, together with draft executive summary and set of draft recommendations, as well as draft roadmap and action plan	as per paragraph 10.4 of the Terms of Reference
Final draft Study, together with revised draft executive summary, set of revised draft recommendations, revised draft roadmap and action plan, as well as draft policy brief	as per paragraph 10.5 of the Terms of Reference
PowerPoint presentation	as per paragraph 10.6 of the Terms of Reference

Company profile

14 The company must demonstrate:

- .1 a minimum of three (3) years' experience in providing consulting services in the area of environmental sciences, marine science, marine biology, maritime technology or closely related field; and
- .2 a minimum of two (2) qualified personnel to provide the services, and ability to provide an equally qualified consultant, in case a replacement is required during the implementation of the Assignment. The Curriculum Vitae (CVs) of the qualified personnel shall be submitted accordingly.

Personnel qualification

15 The proposed personnel must have:

- .1 a university degree in environmental sciences, marine science, marine biology, maritime technology or other closely related field;
- .2 a minimum of five (5) years' experience in delivering technical projects related to preventing air pollution from ships as well as controlling and managing ships' biofouling;
- .3 at least three (3) years' experience in research and analytical work associated with the implementation of MARPOL Annex VI, notably the regulations on the carbon intensity of international shipping, and with the implementation of the Biofouling Guidelines;
- .4 strong technical skills related to: ship's hydrodynamic performance, ship energy efficiency, carbon intensity reduction measures, control and management of ships' biofouling – at least three (3) previous assignments;
- .5 direct experience in relevant practices for fuel-efficient operation of ships and biofouling management practices – at least one (1) previous assignment;
- .6 skills related to the use of analytical tools as well as the review of research and other materials; and
- .7 excellent communication and presentation skills.

Other

The technical proposal must include a Project Execution Plan

The technical proposal must include a Risk Management Plan

SECTION D: FINANCIAL BID FORM

FINANCIAL BID

Quotation Title Request for Quotations for the provision of consultancy services for the preparation of a Study analysing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean region

Reference Number REM_Quote 10/2024

Item No.	Description	Detailed Items to be provided	Total Cost of Service Provided	Total including Taxes/Charges, other Duties & Discounts <u>BUT</u> Exclusive of VAT (Delivered Duty Paid – DDP) €
1	Consultancy services for the preparation of a Study analysing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean region	As detailed in Section C on page 5 of this RfQ.		
GRAND TOTAL INCLUDING TAXES/CHARGES, OTHER DUTIES & DISCOUNTS BUT EXCLUSIVE OF VAT (DELIVERED DUTY PAID-DDP) €				

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

**TERMS OF REFERENCE FOR THE PROVISION OF CONSULTANCY SERVICES FOR
THE PREPARATION OF A STUDY ANALYSING THE IMPACT OF BIOFOULING ON THE
ENERGY EFFICIENCY OF SHIPS AND THE GHG ABATEMENT POTENTIAL OF
BIOFOULING MANAGEMENT MEASURES IN THE MEDITERRANEAN REGION**

**Voluntary contribution from the French Ministry for Europe and Foreign Affairs (rolled
over funds)**

WBS Element No: XB/0143-03-02-02-03-2240

Mediterranean Trust Fund (MTF)

WBS Element No: XB/0143-03-02-02-01-2240

Voluntary contribution from the French Ministry for Europe and Foreign Affairs

WBS Element No: XB/0143-03-02-03-03-2240

**Activity No. 3.2.2. Mobilise and implement innovative solutions to reduce GHG
emissions from ships in selected ports, including through energy efficiency and
decarbonisation**

Background

1 The Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) is a Regional Activity Centre established within the framework of the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP), also referred to as UNEP/MAP, with a view to coordinating the activities of the Mediterranean coastal States related to the implementation 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”) to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (the “Barcelona Convention”). The Centre is based in Malta, hosted by the Maltese Government, and is administered by the International Maritime Organization (IMO) in cooperation with UNEP/MAP.

2 In 2018, IMO adopted the Initial IMO Strategy on reduction of greenhouse gas (GHG) emissions from ships (hereinafter referred to as the Initial IMO GHG Strategy), which defined the objectives, tools, pace of work and guiding principles and as such was the framework for IMO Member States to decarbonise shipping.

3 In 2020, IMO adopted a Resolution to encourage IMO Member States to develop and submit voluntary National Action Plans (NAPs) to address GHG emissions from ships, which was revised in 2022 to include references to shipping routes to support decarbonisation (Resolution MEPC.367(79)). The latter suggests that NAPs could include but are not limited to:

- .1 improving domestic institutional and legislative arrangements for the effective implementation of existing IMO instruments;
- .2 developing activities to further enhance the energy efficiency of ships;
- .3 initiating research and advancing the uptake of alternative low-carbon and zero-carbon fuels;
- .4 encouraging the production and distribution of such fuels for shipping;
- .5 accelerating port emission reduction activities, consistent with resolution MEPC.366(79);
- .6 fostering capacity-building, awareness-raising and regional cooperation;
- .7 facilitating the development of infrastructure for green shipping; and
- .8 facilitating voluntary cooperation through the whole value chain, including ports, to create favourable conditions to reduce GHG emissions from ships through shipping routes and maritime hubs consistent with international law, including the multilateral trade regime.

4 To support evidence-based decision making on addressing GHG emissions from international shipping, IMO has since 2000 commissioned studies to estimate GHG emissions from the sector and project possible developments. These studies prepared by reputable research organisations across the world, under the oversight of a panel of IMO Member States Governments and the IMO Secretariat, are a global reference in estimating GHG emissions from international shipping.

5 In July 2023, IMO adopted the 2023 IMO Strategy on Reduction of GHG Emissions from Ships (hereinafter referred to as the 2023 IMO GHG Strategy) in accordance with the agreed programme of follow-up actions, which now replaces the Initial IMO GHG Strategy. The 2023 IMO GHG Strategy represents a framework for IMO Member States, setting out the future vision for international shipping, the levels of ambition to reduce GHG emissions and guiding principles; and includes candidate mid- and long-term further measures with possible timelines and their impacts on States. It also identifies barriers and supportive measures including capacity building, technical cooperation as well as research and development (R&D).

6 COP 23¹ agreed to include the following activity in the UNEP/MAP Programme of Work and Budget for 2024-2025²:

- 3.2.2. Mobilise and implement innovative solutions to reduce GHG emissions from ships in selected ports, including through energy efficiency and decarbonisation.

7 The Mediterranean region, with its unique challenges and opportunities, requires tailored approaches for the successful implementation of the 2023 IMO GHG Strategy by Contracting Parties to the Barcelona Convention (CPs), including relevant stakeholders. Biofouling, the accumulation of marine organisms on ships' hulls, is a significant factor affecting vessel efficiency and thus having an impact on GHG emissions from ships.

¹ Twenty-third Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Protocols (Portorož, Slovenia, 5-8 December 2023).

² UNEP/MED IG.26/22, Decision IG.26/14.

8 To this effect, a consultancy is envisaged to support REMPEC with its efforts towards assessing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean region.

Objectives

9 The principal objective of this consultancy will be to prepare a study analysing the impact of biofouling on the energy efficiency of ships and the GHG abatement potential of biofouling management measures in the Mediterranean region (hereinafter referred to as “the Study”) aimed at:

- .1 evaluating the impact of biofouling in vessel hulls and niche apparatus areas on fuel consumption and associated GHG emissions from ships;
- .2 identifying current international practices and technologies for the control and management of ships’ biofouling as well as their effectiveness in reducing GHG emissions from ships;
- .3 identifying the impact of biofouling proactive and reactive management measures on fuel consumption and associated reduction of GHG emissions from ships; and
- .4 developing recommendations for policy interventions, best practices, and technological innovations that may be implemented to contribute to the reduction of GHG emissions from ships through the control and management of ships’ biofouling in the Mediterranean region.

Assignment

10 For the completion of this consultancy, which shall not exceed **forty (40)** working days in total, the Consultant shall:

- .1 attend a kick-off Meeting to be held through videoconference, **preferably within three days after signing the contract**, to discuss the content of the reference documents to be analysed, the scope of the assignment, as well as to collect all required information for the completion of this consultancy and to agree on the method of work and communication channel;
- .2 draft a brief summary of the kick-off Meeting reflecting the main outcomes of the meeting, and prepare a workplan for the completion of this consultancy;
- .3 prepare, in consultation with REMPEC, a draft Study, which shall include:
 - .1 a compilation of policy and regulatory frameworks, international conventions, as well as industry standards related to the control and management of ships’ biofouling in relation to the reduction of GHG emissions from ships, to better understand the regulatory landscape globally and in the Mediterranean region;
 - .2 a review of existing literature and reports on ships’ biofouling and its impact on GHG emissions from ships in the Mediterranean region;

- .3 an analytical overview of the relationship between the control and management of ships' biofouling and the reduction of GHG emissions from ships, and an overview of stakeholders involved;
 - .4 an analysis of the effectiveness of current practices and technologies for the control and management of ships' biofouling; and
 - .5 an assessment of the costs and benefits from an environmental and biosafety perspective of strategies for the control and management of ships' biofouling, including hull coatings, cleaning techniques, and key biofouling prevention measures.
- .4 prepare, in consultation with REMPEC, a revised draft Study, taking into account the feedback and comments provided by REMPEC on the draft Study referred to in paragraph 10.3 above, which shall include:
 - .1 a draft executive summary detailing the study findings;
 - .2 a set of draft recommendations tailored to the Mediterranean context, taking into account the specific challenges and opportunities in the region; and
 - .3 a draft roadmap and action plan for addressing the challenges identified, with timelines, milestones, and responsibilities for CPs, including relevant stakeholders, taking into account capacity-building, technical assistance, and financial support needs.
 - .5 prepare, in consultation with REMPEC, a final draft Study, taking into account the feedback and comments provided by REMPEC on the revised draft Study referred to in paragraph 10.4 above, which shall include:
 - .1 a revised draft executive summary;
 - .2 a set of revised draft recommendations;
 - .3 a revised draft roadmap and action plan; and
 - .4 a draft policy brief highlighting actionable recommendations for policymakers and industry stakeholders.
 - .6 prepare, in consultation with REMPEC, a PowerPoint presentation summarising the key outcomes of the final draft Study referred to in paragraph 10.5 above, for dissemination to CPs, including relevant stakeholders.

Geographical scope of the assignment

- 11 The Consultant will primarily perform the assignment from office/home.

Reporting

- 12 The Consultant shall:
- .1 prepare and submit to REMPEC, not later than **three days after the meeting**, the draft kick-off Meeting summary and the workplan referred to in paragraph 10.2 above;
 - .2 prepare and submit to REMPEC, not later than **2 August 2024**, the draft Study referred to in paragraph 10.3 above;
 - .3 prepare and submit to REMPEC, not later than **13 September 2024**, the revised draft Study, together with the draft executive summary and the set of draft recommendations, as well as the draft roadmap and action plan, referred to in paragraph 10.4 above; and
 - .4 prepare and submit to REMPEC, not later than **22 November 2024**, the following documents:
 - .1 the final draft Study, together with the revised draft executive summary, the set of revised draft recommendations, the revised draft roadmap and action plan, as well as the draft policy brief, referred to in paragraph 10.5 above; and
 - .2 the PowerPoint presentation referred to in paragraph 10.6 above.

13 All documents produced by the Consultant shall be prepared using the Established Guidelines for the preparation of reports on seminars, symposia, courses, workshops, and similar events, provided in Annex II to the “REMPEC Consultant Booklet” unless instructed otherwise by REMPEC (i.e. specific document template(s) to be provided by REMPEC) and shall be drafted in English, formatted according to REMPEC requirements, as well as provided in electronic format using software compatible with Microsoft Office.

14 The following disclaimer shall appear in all documents prepared by the Consultant:

“This activity is financed by the voluntary contribution from the French Ministry for Europe and Foreign Affairs and the Mediterranean Trust Fund and is implemented by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), in cooperation with the International Maritime Organization (IMO).

The views expressed in this document are those of the Consultant and are not attributed in any way to the United Nations (UN), the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP), IMO or REMPEC.

The designations employed and the presentation of material in this document do not imply the expression of any opinion whatsoever on the part of the UN Secretariat, UNEP/MAP, IMO or REMPEC, concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.”

Schedule

15 The work and tasks set out in the present document shall be completed by **2 December 2024**. The contract will be terminated following the submission by the Consultant of the final draft Study and the PowerPoint presentation referred to above, as well as the subsequent certification by REMPEC that the performance of the duties and the work carried out are satisfactory.

16 Within that timeframe, the Consultant shall organise work in the best possible manner and ensure the successful completion of the consultancy.

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

**LIST OF CRITERIA FOR THE ANALYSIS OF THE
QUOTATIONS FOR THE PROVISION OF CONSULTANCY SERVICES FOR THE
PREPARATION OF A STUDY ANALYSING THE IMPACT OF BIOFOULING ON THE
ENERGY EFFICIENCY OF SHIPS AND THE GHG ABATEMENT POTENTIAL OF
BIOFOULING MANAGEMENT MEASURES IN THE MEDITERRANEAN REGION**

The quotations shall be analysed, based on the following criteria and corresponding scores:

	Score
Comprehension	30
Is the presentation clear and understandable?	0 - 3
Are all outputs addressed?	0 - 3
Is the technical proposal viable?	0 - 3
Is the approach suitable?	0 - 4
Is the timeline accurate and clear?	0 - 3
Is the methodology accurately described, including on the use of tools?	0 - 5
Is the information flow with the Centre frequent?	0 - 3
Is the knowledge of present legislation indicated?	0 - 3
Does it meet the deadlines?	0 - 3
Profile	40
Qualification	0 - 10
General Experience	0 - 10
Technical knowledge / Special skills	15
Strong knowledge of the subject	0 - 3
Relevance of similar projects achieved	0 - 3
Indication of drafting skills	0 - 3

Knowledge of office software	0 - 3
Fluency in English	0 - 3
Political and regional knowledge	5
Does the consultant have experience in the Mediterranean?	0 - 2
Does the experience cover both private and public sector?	0 – 2
Worldwide coverage	0 – 1
Technical proposal total score	70

Maximum score for the technical proposal is 70 points. Technical threshold fixed at 50 points.

Qualification		General Experience	
o Diploma	1	o +25 years	10
o Bachelor	5	o +15 years	8
o Master	7	o +5 years	6
o PhD	9	o Less than 5 years	4

Financial proposal	5
Amount in local currency	
Amount in €	
Financial overall	25
Financial proposal total score	30

Maximum score for the financial proposal is 30 points.

Total score	100
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Maximum total score is 100 points.

The quotation with the highest total score is selected.