



Mediterranean
Action Plan
Barcelona
Convention



INTERNATIONAL
MARITIME
ORGANIZATION

**REPORT
REGIONAL WEBINAR ON EFFECTIVE ENFORCEMENT OF MARPOL
ANNEX VI WITH SPECIFIC REFERENCE TO MED SO_x ECA
REQUIREMENTS**

ONLINE, 24 SEPTEMBER 2025

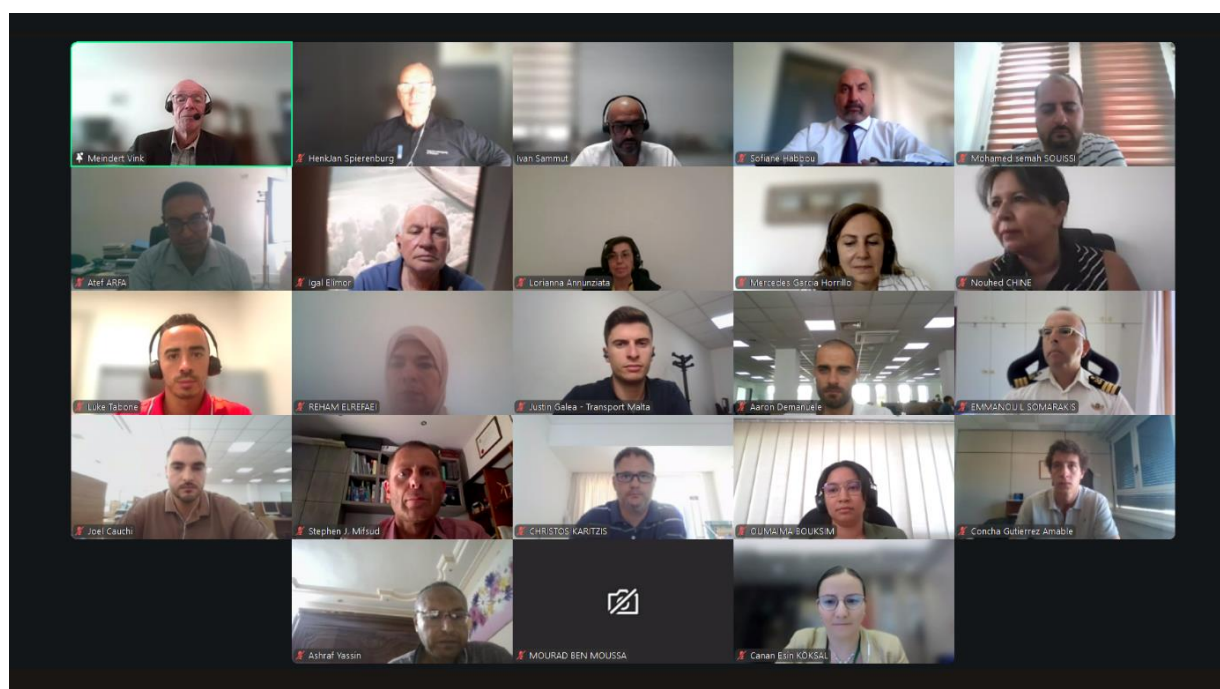
***Report by REMPEC consultant
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SUMMARY SHEET

Title of the Webinar:	Regional Webinar on Effective Enforcement of MARPOL ANNEX VI with specific reference to the MED SO _x ECA requirements.
Host:	Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC)
Venue and date:	Online 24 September 2025
Type:	Regional
Organised by:	Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), in close cooperation with the International Maritime Organization (IMO)
Supported by:	Mediterranean Trust Fund (MTF)
Number of Participants and Number of Countries and/or Organizations:	51 participants from 13 out of 22 Contracting Parties to the Barcelona Convention

Summary

The Webinar on Effective Enforcement of MARPOL ANNEX VI with specific reference to the MED SO_x ECA requirements was held online the 24th of September 2025.

The target audience for the Webinar were Government officials responsible for ratification, implementation and enforcement of MARPOL Annex VI.

Beyond raising awareness on the effective implementation and enforcement of MARPOL Annex VI and related Guidelines in the Mediterranean region, through a series of presentations from REMPEC Consultants, the Webinar held questions and exercises on enforcement in relation to MARPOL Annex VI and the Med SO_x ECA and identified actions needed for a consistent implementation of the Med SO_x ECA.

Best practices, including lessons learned from other Emission Control Areas (ECAs) that were established by IMO (i.e. the Baltic Sea area; the North Sea area), were also exchanged, through presentations from REMPEC Consultants.

Key words: Air pollution from ships, Webinar, Mediterranean Sea, Emission Control Area, MARPOL ratification, Enforcement

Co-ordinator: Ivan Sammut (REMPEC), in close cooperation with REMPEC consultants Meindert Vink and Henk Jan Spierenburg

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1. INTRODUCTION

1.1 The Webinar on Sulphur inspections, compliance, technology and best practices for the consistent enforcement of the 0.10 % sulphur limit in the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (MED SO_x ECA), hereinafter referred as 'the Webinar', was convened on line 24 September 2025.

1.2 The Webinar, organised by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), was financed by the Mediterranean Trust Fund (MTF). The List of Participants is contained in Annex I.

1.3 The 79th Session of the IMO's Marine Environment Protection Committee (MEPC 79) (London, UK, 12-16 December 2022) adopted amendments to MARPOL Annex VI concerning the Med SO_x ECA, with effective application as from 1 May 2025.

2. OBJECTIVE

The principal objectives of the Webinar were:

2.1 to raise awareness on MARPOL Annex VI and related Guidelines, notably the consistent implementation and enforcement of the 0.10% sulphur limit under MARPOL Annex VI in the Med SO_x ECA;

2.2 to strengthen national capacity for an effective implementation and enforcement of MARPOL Annex VI;

2.3 to provide for a greater understanding and appreciation of the requirements for implementation and enforcement of MARPOL Annex VI, in order to be able to lead the efforts of the Government of the beneficiary countries towards ratification and more effective implementation, compliance and enforcement, both as a flag State and as a port State;

2.4 to discuss about the challenges and opportunities for the beneficiary countries to ratify and implement MARPOL Annex VI as well as implement the Med SO_x ECA and

2.5 to exchange about best practices, including lessons learned from other Emission Control Areas (ECAs) that were established by IMO (e.g. the Baltic Sea area; the North Sea area).

3. VENUE, DATE, ROLES AND PARTICIPANTS

3.1 The Webinar was held online

3.2 The Webinar was held on 24 September 2025.

3.3 REMPEC conducted all the logistics for the Webinar, including the opening and closing ceremonies, arrangements for use of the online platform by the participants, REMPEC Consultants, reproduction of materials and operation of Webinar equipment.

3.4 The target audience for the Webinar were Government officials responsible for ratification, implementation and enforcement of MARPOL Annex VI. All REMPEC Prevention Focal Points were invited to nominate jointly and, in consultation with the REMPEC Governmental Focal Points, their representatives in the Webinar.

3.5 Mr Ivan Sammut, Head of Office/Chef Bureau of REMPEC oversaw the organisation and coordination of the Workshop. He closely worked with the REMPEC Consultants Mr Meindert Vink and Henk Jan Spierenburg.

4 OPENING SESSION

4.1 The Webinar started on Wednesday, 24 September at 1000 hours.

4.2 The Head of Office of REMPEC, Mr Ivan Sammut, opened the Webinar. He elaborated that the goal was to raise awareness on the Med SO_x ECA, assist and give knowledge of requirements as well as ensure consistent implementation. It was meant to be an interactive webinar, with an exchange of views and best practices.

4.3 He gave an overview of expected actions and special attention to countries who not yet ratified and urged them to do so. He also reiterated REMPEC's commitment to continue providing the necessary technical assistance to Contracting Parties, to prepare for ratification.

4.4 He mentioned that consistent, fair, and effective implementation is essential and REMPEC is deeply committed to capacity building: supporting training, assisting regulatory alignment, facilitating stakeholder coordination, and helping remove obstacles to compliance.

4.5 In line with this, he was delighted to highlight that during the 16th Meeting of REMPEC Focal Points, held in Malta in May 2025, the Guidance Document on the consistent implementation of the 0.10% sulphur limit under MARPOL Annex VI in the Med SO_x ECA, hereinafter referred to as 'the Guidance Document', was officially endorsed.

4.6 But while this guidance provides a strong foundation, full effectiveness depends on wider ratification of MARPOL Annex VI by all Mediterranean coastal States. Remnants of regulatory gaps or non-ratification risk uneven application, competitive distortions, and less-than-optimal environmental outcomes.

4.7 He closed with his expression and appreciation to all the experts, speakers, and participants for their presence and continued engagement and to continue the journey together for cleaner air, healthier seas, and a more resilient Mediterranean region.

5 INTRODUCTION TO MARPOL ANNEX VI

Mr Meindert Vink introduced MARPOL Annex VI, by providing an overview, presenting MARPOL Annex VI regulation 14 (SO_x and particulate matter) and 18 (Fuel oil availability and quantity), notably the Guidance Document, as well as referring to the 2019 Guidelines for consistent implementation of IMO 2020 under MARPOL Annex VI and the latest developments on new ECAs. His presentation included the following topics:

1. Overview of MARPOL Annex VI
2. Key provisions Annex VI Reg 14 and 18
3. 2019 Guidelines for consistent implementation of the 0.50% Sulphur limit
4. Guidance document on the Consistent implementation of the 0.10% Sulphur limit in the MED SO_x ECA.
5. Latest developments on new ECA's such as Canadian Arctic & Norwegian Sea as well as the North-East Atlantic Ocean.

After the presentation a question was raised using a Poll with multiple answers so everybody could choose the right/wrong answer. Many of the participants answered correctly.

6 REGULATORY LANDSCAPE OF SULPHUR CONTENT

Mr Meindert Vink continued presenting about global, as well as regional sulphur limits in fuel and the implications for shipping, refining and ports. He presented also about enforcement trends and penalties. His presentation included the following topics:

1. IMO movie about Greener shipping and future marine fuels
2. Global versus regional Sulphur limits in fuels
3. Compliance mechanisms and trends and outlook
4. Implications for shipping and refining
5. Enforcement trends and penalties
6. Lessons learned from experience
7. Detection of Sulphur including a movie about detection by using a plane.

The presentation was followed by an interactive Poll , that were answered by most of the participants correctly.

7 SULPHUR INSPECTION METHODS & EQUIPMENT

On this item, Mr Meindert Vink continued with two presentations. The first one concerning sulphur inspections methods and the second about the real world of inspection process. He highlighted the sampling protocols of fuel on board and fuel in use according to the IMO guidelines and the control on board of fuel related paperwork. He continued with the fuel change over procedure on board before entering the Sulphur emission control area. As an example he used a real sea going tug. The first presentation addressed the following topics:

1. Sampling of fuel to be used or carried on board
2. Sample handling
3. Movie about sampling fuel carried in tanks
4. Analysing of fuel samples
5. Fuel change over before entering (S)ECA's
6. One Poll question about Fuel change over
7. Bunkering of fuel with the port of Rotterdam as an example
8. What to do in case of non-compliance
9. The FONAR procedure

Mr Meindert Vink continued with the second presentation about the real situation on an existing ship as example. "Sulphur Inspection on the sea going tug ELBE". This presentation contained the following items:

1. Introduction of the example ship ELBE
2. Document review with examples of the documents
3. Fuel line diagram with explanation
4. Several photographs of the situation on board this ship
5. The procedure of the MARPOL sample
6. Flashpoint of fuel information
7. Common non-compliance issues

At the end of this presentation there were poll questions about sampling. Many of the participants answered correctly.

8 EXHAUST GAS CLEANING SYSTEMS (EGCS)

Mr Henk Jan Spierenburg presented about inspections on Exhaust Gas Cleaning Systems. At first he explained the principles of these installations and he continued with practical tips about inspections on this equipment. For this he highlighted the process of approval of certificates, logbooks, alarm systems and failure handling of exhaust gas cleaning systems. The presentation covered the following items:

1. The working of the EGCS in open and closed loop
2. Alkalinity of the Mediterranean sea
3. What to look for during EGCS inspections
4. EGCS alarm and gas monitor systems
5. IMO and SECA mode
6. Example on performing complete EGCS inspections
7. Enforcement procedures

9 INTERACTIVE EXERCISE POLL FOLLOWED BY QUESTION & ANSWERS SESSION

After the coffee break a poll providing 5 possible situations as mentioned below with multiple answers was introduced. Many of the participants answered to the exercises and most of them showed a good understanding of the presented scenarios with ships not using compliant fuel and how to act during a port State control. The exercises contained the following situations:

1. Low sulphur fuel not available and FONAR document submitted
2. Port entrance sniffer detected high sulphur in e dredger exhaust gas plume
3. Sampling of in tank fuel showed >0.55 % Sulphur contend
4. Scrubber SO_x monitoring equipment appeared to be mal functioning
5. Scrubber on IMO mode instead of SECA mode

Most of the participants answered to the Polls correctly. All questions and answers were extensively explained.

A Q&A session followed but not many questions raised.

10 CLOSING CEREMONY

10.1 The Head of Office of REMPEC made the closing remarks. He elaborated that this Webinar showed that many of the Contracting Parties to the Barcelona Convention joined the Webinar and followed the presentations and poll exercises.

10.2 He thanked the collective and collaborative attitude of all. He hoped that the momentum created during the Webinar would be maintained during the coming months, leading to the effective enforcement of the Med SO_x ECA. He thanked the REMPEC consultants for their presentations and help in preparing for the Webinar.

10.3 The Webinar was closed on Wednesday 24 September 13:15

11 ACHIEVEMENTS AND CONCLUSIONS

The Webinar was deemed a success, with a highly active participation in the exercises. The participants ended better informed and prepared, for a consistent implementation of the 0.10% sulphur limit under MARPOL Annex VI in the Med SO_x ECA since 1 May 2025.

12 RESOLUTIONS/ RECOMMENDATIONS

12.1 The Webinar thanked the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), as Secretariat, and its consultants, for the work they conducted and for their respective contributions to the preparation and successful organisation of the Workshop.

12.2 The webinar appreciated the two speakers from the Netherlands, and facilitators who helped in achieving the objectives of the Webinar.

12.3 The Webinar gathered over 51 participants from 13 out of 22 Contracting Parties to the Barcelona Convention, as well as representatives from relevant regional and international organisations. The target audience for the Webinar were Government officials responsible for ratification, implementation and enforcement of MARPOL Annex VI.

ANNEXES

ANNEX I - List of Participants

ANNEX II - List of lectures and reference material

Annex I

Name of Participant	Contracting Party	Organisation
Abdelhak Boukharouba	Algeria	Ministry of Transport
Fadia Djebbar	Algeria	Ministère de l'Energie, des Mines et des Energies Renouvelables
Khaled Benali	Algeria	Ministere des Transports
Malik Mechhoud	Algeria	SONATRACH
Nora Zouaoui	Algeria	Ministère des hydrocarbures et des Mines
Rachid Hakka	Algeria	MEM
Sofiane Habbou	Algeria	Hyproc Shipping Company
Christos Karitzis	Cyprus	Cyprus Shipping Deputy Ministry
Ioannis Moschatos	Cyprus	Shipping Deputy Ministry of Cyprus
Valentinios Mavroudis	Cyprus	Shipping Deputy Ministry
Ashraf Yassin	Egypt	Egyptian authority for maritime safety
Aya Ismail	Egypt	Alexandria Port authority
Reham Elrefaei	Egypt	Damietta Port Authority
Mercedes Garcia Horrillo	EMSA	EMSA
Rosa Antidormi	EU	European Commission
Dimitrios Katsaris	Greece	Hellenic Republic / Ministry of Maritime Affairs and Insular Policy / Hellenic Coast Guard / Patra's Central Port Authority
Emmanouil Somarakis	Greece	Hellenic Coast Guard
Ivi Armyra	Greece	Ministry of Maritime Affairs and Insular Policy/ Hellenic Coast Guard
Niki Plakantonaki	Greece	Ministry of Maritime Affairs and Insular Policy-Hellenic Coast Guard Headquarters-Marine Environment Protection Directorate
Sofia Giapalaki	Greece	Hellenic Republic Ministry of Maritime Affairs & Insular Policy Hellenic Coastguard Headquarters Ships' Inspection General Directorate Ships' Design & Construction Directorate
Igal Elimor	Israel	Israeli Shipping and Port Administration
Lorianna Annunziata	Italy	Ministero dell'Ambiente e della Sicurezza Energetica /Direzione Generale PIF
Aaron Demanuele	Malta	Transport Malta - Merchant Shipping Directorate
Joel Cauchi	Malta	Transport Malta - Merchant Shipping Directorate
Justin Galea	Malta	Transport Malta - Ports & Yachting Directorate
Marc' Andre Cassar	Malta	Environment & Resources Authority

Noel Sciberras	Malta	Regulator For Energy and Water Services
Stephen J. Mifsud	Malta	Regulator for Energy and Water Services
Pierre Bouchet	Monaco	Direction des affaires maritimes de Monaco
Abdellatif Herrar	Morocco	Service de la marine marchande de TANGER
Hanane Atmane	Morocco	Merchant Marine Directorate
Mustapha Chaye	Morocco	Merchant Marine Directorate
Naoual Zoubair	Morocco	Ministère de la Transition Energétique et du Développement Durable
Nezha Damnati Adib	Morocco	Ministère de la Transition Energétique et du Développement Durable
Oumaima Bouksim	Morocco	Ministry of Transport and Logistics
Concha Gutierrez Amable	Spain	Dirección General de la Marina Mercante
Atef Arfa	Tunisia	Office de la Marine Marchande et des Ports Sous Tutelle Ministère des Transports en Tunisie
Helmi Hajri	Tunisia	COTUNAV
Ibtissem Thabti	Tunisia	Ommmp
Mohamed semah Souissi	Tunisia	Merchant Marine and Ports Office
Mourad Ben Moussa	Tunisia	Agence Nationale de Protection de l'Environnement
Nouhed CHINE	Tunisia	Office of Merchant Marine and Ports (OMMP)
Seif Eddine Ayari Ayari	Tunisia	CTN
Canan Esin Köksal	Türkiye	Republic of Türkiye Ministry of Environment Urbanization Climate Change
Özlem Özer	Türkiye	Ministry of Environment, Urbanization and Climate Change
Rüveyda Öğütlü Erdoğan	Türkiye	Ministry of Environment, Urbanization and Climate Change
Ivan Sammut		REMPEC
Luke Tabone		REMPEC
Mary Grace Pisani		REMPEC
HenkJan Spierenburg		REMPEC Consultant
Meindert Vink		REMPEC Consultant

ANNEX II

List of Lectures and References

Circular Letter No. 5005: Draft revised MARPOL Annex VI

Res MEPC.320(74): 2019 Guidelines for the consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI

MSC-MEPC.2/Circ.18: Guidelines for the sampling of fuel for determination of compliance with MARPOL Annex VI and Solas Chapter II-2

MEPC.1/Circ.864/Rev.1: 2019 Guidelines for on board sampling for the verification of the sulphur content of the fuel used on board ships

MEPC.1/Circ.889: 2020 Guidelines for on board sampling of fuel intended to be used or carried for use on board a ship

MEPC.1/Circ.883/Rev.1 Guidance On Indication Of Ongoing Compliance In The Case Of The Failure Of A Single Monitoring Instrument (EGCS)

REMPEC: Guidance document of the 0.10% Sulphur limit under MARPOL Annex VI in the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (MED SO_x ECA)