

MARINE ENVIRONMENT PROTECTION  
COMMITTEE  
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Agenda item 3

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## CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS

### Emission Control Areas (ECAs) – work in progress for cleaner air and healthy coastal communities

Submitted by FOEI, WWF, Pacific Environment and CSC

#### SUMMARY

*Executive summary:* This document welcomes the adoption of a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (MEPC 79/3/2), whilst pointing to the importance of continued work on ship air pollution in other parts of Europe and the Arctic.

*Strategic direction, if applicable:* 4

*Output:* 4.1

*Action to be taken:* Paragraph 9

*Related document:* MEPC 79/3/2

#### Introduction

1 This document comments on document MEPC 79/3/2 and is submitted in accordance with the provisions of paragraph 6.12.5 of the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.3).

2 The co-sponsors welcome the Committee's consideration of draft amendments to MARPOL Annex VI concerning a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (MEPC 79/3/2) and urge the Committee to adopt them.

3 While shipping provides a wide range of services to the global economy, this comes at a considerable cost in terms of damage to air and water quality, with very significant negative impacts on the climate, human health and ocean biodiversity. Sulphur oxide (SO<sub>x</sub>) emissions from ships lead to negative health effects, especially in coastal communities, and the occurrence of acid rain which damages buildings and infrastructure as well as landscapes. Similarly, nitrogen oxide (NO<sub>x</sub>) emissions cause eutrophication and acidification, which in turn can lead to the disruption of aquatic and terrestrial ecosystems.

4 Emission Control Areas (ECAs) support the goal of reducing atmospheric pollutants, and a Sulphur Oxide and Particulate Matter ECA, in addition to reducing SO<sub>x</sub> pollution and short-lived climate pollutants (SLCP), also has the effect of encouraging the shipping industry to use the cleanest fuels available today.

### **International Institute for Applied Systems Analysis study**

5 In 2018, the European Commission commissioned the International Institute for Applied Systems Analysis (IIASA) to conduct a study to determine the cost-effectiveness of designating further ECAs for all European Seas. The study identified that designation of such ECAs would result in a more than 90% reduction in SO<sub>2</sub> emissions, and a reduction in NO<sub>x</sub> emissions by 2050.<sup>1</sup>

6 The IIASA study concluded that designating the Mediterranean Sea as an ECA for both SO<sub>x</sub> and NO<sub>x</sub> would result in an up to 80% and 20% reduction, respectively, by 2030. This would have significant benefits, for human health especially, when implemented alongside the use of fine particle filters. An ECA for SO<sub>x</sub> and NO<sub>x</sub> in the Mediterranean Sea would prevent up to 4,000 premature deaths annually by 2030, of which about one third would have occurred in EU Member States and more than half in North Africa and the Middle East.<sup>2</sup> By 2050, the control of SO<sub>x</sub> and NO<sub>x</sub> emissions in the Mediterranean Sea could save more than 10,000 lives annually.<sup>3</sup>

### **Way forward**

7 The co-sponsors welcome the proposal to designate the Mediterranean Sea as an Emission Control Area for Sulphur Oxides and Particulate Matter. This is a vital step in the direction of cleaner air for Mediterranean coastal communities. Moreover, the co-sponsors believe that there is a strong case for extending the Mediterranean Sea ECA to cover NO<sub>x</sub> emissions and for the establishment of further additional ECAs that would link the Mediterranean Sea ECA to the existing ECAs in the North Sea and Baltic Sea and reach further north to the Arctic. Notably, when established alongside the use of fine particle filters, full ECAs in all European waters would prevent around 8,000 premature deaths annually by 2030.<sup>4</sup>

8 The establishment of ECAs in the northeast Atlantic and Arctic could also play a very significant role in tackling black carbon emissions affecting the Arctic. Studies have shown that black carbon and Particulate Matter (PM) in the Arctic has five times the climate impact compared to emissions at lower latitudes, and emissions in and near to the Arctic should be a priority for regulation.

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<sup>1</sup> Cofala, J., Amann, M., Borken-Kleefeld, J., Gomez-Sanabria, A., Heyes, C., Kiesewetter, G., Sander, R., Schoepp, W., Holland, M., Fagerli, H., Nyiri, A. (2018), The potential for cost-effective air emission reductions from international shipping through designation of further Emission Control Areas in EU waters with focus on the Mediterranean Sea. IIASA (International Institute for Applied Analysis), December 2018. [Shipping\\_emissions\\_reductions\\_main.pdf \(iiasa.ac.at\)](#)

<sup>2</sup> <https://www.rempec.org/en/knowledge-centre/online-catalogue/2019/rempec-wg-45-inf-11-technical-feasibility-study-for-the-implementation-of-an-emission-control-area-eca-in-eu-waters-with-focus-on-the-mediterranean-sea-submitted-by-the-european-union-english-only>

<sup>3</sup> IIASA, December 2018.

<sup>4</sup> IIASA, December 2018.

**Action requested of the Committee**

9 The Committee is invited to note the information contained in paragraphs 2 to 8 and, in particular, the co-sponsors' support for the designation of the Mediterranean Sea Emission Control Area of Sulphur Oxides and Particulate Matter.

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