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IDENTIFICATION AND PROTECTION OF SPECIAL AREAS, ECAs AND PSSAs

Feedback on ECA proposals from Canada and Norway and related matters

Submitted by FOEI, WWF, Pacific Environment and CSC

SUMMARY

Executive summary:	This document welcomes the proposals from Canada and Norway to designate Emission Control Areas (ECAs) for nitrogen oxides, sulphur oxides and particulate matter, in Canadian Arctic waters and the Norwegian Sea, respectively. This document also highlights the need to ensure the benefits of establishing ECAs are fully realized by taking urgent action to rectify the fundamental shortcomings of both regulation 13 of MARPOL Annex VI and the 2008 NO_x Technical Code.
Strategic direction, if applicable:	4
Output:	4.1
Action to be taken:	Paragraph 14
Related documents:	MEPC 81/11, MEPC 81/11/1, MEPC 81/INF.7; MEPC 80/16/5, MEPC 80/INF.35; MEPC 81/INF.7; PPR 11/INF 2/Rev 1 and PPR 11/INF.4

Introduction

1 This document is submitted in accordance with the provisions of the *Organization and method of work of the Maritime Safety Committee and the Marine Environmental Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.5), and comments on documents MEPC 81/11 (Canada) and MEPC 81/11/1 (Norway).

2 The co-sponsors welcome the proposals from Canada and Norway to designate Emission Control Areas (ECAs) for nitrogen oxides (NO_x), sulphur oxides (SO_x) and particulate matter (PM), in Canadian Arctic waters and the Norwegian Sea, respectively.

3 ECAs remain one of the more beneficial and efficient tools at Member States' disposal to tackle air pollution from ships and are particularly relevant in affected regions and sensitive ecosystems like the Arctic. Therefore, it is important that proposals for new ECAs are as effective and environmentally sound as possible, to ensure their full potential is realized, as originally envisaged in MARPOL.

Maximizing the potential benefits of ECAs

4 The proposed designation of ECAs in Canadian Arctic Waters and the Norwegian Sea has the potential to drive broad positive change, especially if the compliance mechanism rests on a switch to distillates and/or to truly cleaner fuels (renewable fuels of non-biological origin). Moreover, reducing SO_x and PM emissions may also provide the co-benefit of reducing Black Carbon (BC) emissions, provided ECA-compliant fuels and, in particular, distillates are used. Document MEPC 81/11 provides a welcome and clear reference to the fact that alternative compliance methods, particularly the use of scrubbers, do not provide the same BC benefits. In case one forgets, BC constitutes 20% of the shipping sector's global climate impact, and it is five times more potent a climate disruptor when emitted in the Arctic region from sources such as shipping.

5 As Inuit Circumpolar Council (ICC) has detailed in their submission, MEPC 80/16/5, "... there are immediate human health consequences of being exposed to particulate matter and BC emissions: premature death in people with heart or respiratory disease, non-fatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing. For Inuit, this exposure can significantly affect quality of life and community well-being, adding hardship to already climate-vulnerable communities in the north." Additionally, also in MEPC 80/16/5, ICC describes the unique and vulnerable environment of Inuit Nunaat, the circumpolar Inuit homeland: "The Arctic Ocean and its coastal seas not only serve as highways for Inuit over the ice in winter and in the open water season, but also are essential for harvesting, culture and livelihoods. Inuit way of life is intricately tied to the Arctic ecosystem, and Inuit culture, knowledge systems and the region's biodiversity are bound together. Human health and environmental impacts, including local warming and ice and snow melt from BC emissions have significant consequences for Inuit way of life."

6 Moreover, these new ECA proposals highlight the need for continued work on a possible designation of a broader ECA in the North-East Atlantic Ocean as referred to in document MEPC 80/INF.35. Such an ECA will significantly expand the socio-economic, environmental and health benefits for a large number of coastal communities along the North-East Atlantic region.

7 A number of fundamental regulatory shortcomings have, however, been recently set out in Member State submissions and these need to be urgently addressed by the Committee if IMO and coastal states are to maximize the potential emissions reductions from establishing ECAs.

Stricter regulation for higher and more effective NO_x reductions

8 Documents MEPC 81/INF.7 and PPR11/INF.4 highlight several crucial elements stemming from the slow construction rate of Tier III ships due to apparent evasive behaviour by shipowners. This is related to the gap between keel laying dates and construction dates that leads to a lower-than-expected number of Tier III ships operating in the North American ECA, which, combined with ships operating at low engine loads within the ECA, ultimately triggers the disengagement of Tier III abatement technology. PPR 11/INF.4 suggests that approximately 38% of Tier III engines in the ECA operated at below 25% load. Document MEPC 81/INF.7 reports an exponential number of keels laid just prior to the Tier III deadline in the North American NO_x ECA (4,736 in 2015), which results in ships being exempted from compliance with the Tier III standard and, therefore, able to operate within the North Atlantic NECA as Tier II with adverse impacts on human health and the environment.

9 In addition, the results of NO_x measurement campaigns focused on post 2021 operations in the European ECAs (PPR 11/INF.2/Rev.1) suggest that Tier II ships had, on average, higher NO_x emissions than older Tier I ships; that, on average, Tier III ships had NO_x emissions substantially higher than the maximum Tier III limit of 5.25 g/kWh; and that about 50% of the observed Tier III ships exceeded the maximum Tier II emissions limit. Analysis of keel laying versus new build construction dates revealed similar problems as were experienced earlier in the North American ECA. An analysis by the International Council on Clean Transportation (ICCT) and partners also shows that Tier II engines built between 2011 and 2015, have significantly higher NO_x emission rates than older Tier I engines.[1]

10 The clear gaps between the keel laying date and eventual construction dates are further identified in document MEPC 81/1. Norway states its intention to use the "three dates criteria" in its proposal for the designation of a NO_x ECA in the Norwegian Sea. Proposed amendments to MARPOL Annex VI are included in an annex and merit strong support.

11 Last month, EU Member States and EU members of the Baltic Marine Environment Protection Commission (HELCOM) set out, in a wide-ranging document,[2] their concerns regarding NO_x in the Baltic NECA, including the absence of certification testing for NO_x levels at low engine loads and their inability to prosecute NO_x Tier III-violations successfully. Central to this road map for action on the Baltic Sea NECA was the call for initiatives at both MEPC and PPR to resolve the serious shortcomings in both MARPOL Annex VI and the NO_x Technical Code as first discussed at MEPC 80.

12 There is a clear need, and evident willingness from Member States, to improve NO_x emissions reductions in ECAs. In this regard, IMO has a key role to play by ensuring that stricter regulations are implemented to achieve the NO_x emission reductions that ECAs are intended to provide. This work should be undertaken as a matter of urgency to ensure that ECAs remain an effective tool for addressing air pollution from ships.

13 Doing so will be increasingly important as new ECAs are established in the Arctic region, the broader North-East Atlantic Ocean and the Mediterranean. It is paramount that shipping regulations reflect the urgent need for decarbonization in the sector and the harmful environmental and health impacts on coastal communities, particularly in the Arctic, which supports some of the most climate-vulnerable communities.

Action requested of the Committee

14 The Committee is invited to note the information contained in paragraphs 2 to 13 and is urged to support the proposed ECAs in Canadian Arctic waters (MEPC 81/11) and in the Norwegian Sea (MEPC 81/11/1), and to support decisions being taken by the Committee at this session to resolve the various fundamental shortcomings regarding NO_x abatement now evident in both MARPOL Annex VI and the NO_x Technical Code.

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[1] Real-world NO_x emissions from ships and implications for future regulations. https://theicct.org/publication/real-world-nox-ships-oct23/

[2] https://helcom.fi/post_type_publ/roadmap-to-strengthen-the-implementation-and-enforcement-of-the-baltic-sea-neca/