

SUB-COMMITTEE ON POLLUTION PREVENTION AND RESPONSE 6th session Agenda item 19 PPR 6/19/1 20 December 2018 Original: ENGLISH

### **ANY OTHER BUSINESS**

#### Comments on document PPR 6/19

## **Submitted by EUROMOT**

### **SUMMARY**

Executive summary: This document provides comments on document PPR 6/19 with

regard to the appropriateness of the provided information to engine/SCR systems certified to Tier II or Tier III in accordance with the requirements of IMO MARPOL Annex VI and the  $NO_X$  Technical

Code 2008

Strategic direction

if applicable:

1

Output: 1.24

Action to be taken: Paragraph 8

Related documents: PPR 6/19; PPR 5/10/3 and MEPC 70/9/1

# Introduction

- This document is submitted in accordance with paragraph 6.12.5 of the document on 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.1) and comments on document PPR 6/19 (Norway).
- The merger of engines with selective catalytic reduction (SCR) is one technology option to achieve MARPOL Annex VI Tier III NO<sub>X</sub> limits, which took effect initially in the North American emission control area and the United States Caribbean sea emission control area on 1 January 2016. Since then an increasing number of engine/SCR systems have been delivered and commissioned. Engine manufacturers are gaining experiences with Tier III technology and continuous improvements find their way into the design of engine/SCR systems. Along the way, lessons learnt were reported back by EUROMOT to IMO with document MEPC 70/9/1. The experiences have been incorporated in the 2017 Guidelines addressing additional aspects to the NO<sub>X</sub> Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with Selective Catalytic Reduction (SCR) Systems (resolution MEPC.291(71)) (2017 SCR Guidelines).



#### **Discussion**

- 3 EUROMOT appreciates very much feedback on the practical use of exhaust abatement technologies captured and aggregated in surveys and measurement campaigns. Experiences of ship operators, service providers and port States are invaluable for technology development. Document PPR 6/19 is very welcome against this background.
- The Norwegian  $NO_X$  Fund is an excellent measure to reduce  $NO_X$  emissions from coastal shipping and to foster, with incentives, the required technology development even before a mandatory requirement demands the application of Tier III technology. Engine manufacturers are thankful for this opportunity. In fact, the Norwegian  $NO_X$  Fund promotes to a great extent the acceptance of engine/SCR-technology on board ships. However, it has to be noted that the Fund does not require engine/SCR-systems to undergo the strict certification requirements in accordance with the mandatory instruments of IMO.
- EUROMOT iterated several times the importance of a robust and reliable  $NO_X$  emission certification scheme, as provided by the  $NO_X$  Technical Code 2008 and further detailed in the 2017 SCR Guidelines.  $NO_X$  emission compliance comprises much more than the installation of an exhaust after-treatment device and its commissioning. The IMO instruments stipulate, inter alia, survey and certification procedures, requirements for emission measurements as well as analysers and measurement equipment. The demonstration of ongoing compliance on board, including a checklist for the parameter check method, is set out as well.
- Measures to detect and to counteract deterioration of engine/SCR-systems at an early stage have to be implemented as part of the certification scheme. A procedure has to be provided by the manufacturer in the  $NO_X$  Technical File of the engine/SCR-system. Appendix VII to the  $NO_X$  Technical Code 2008 and the 2017 SCR Guidelines provide, in section 3.2.8, the sound basis for this. In document PPR 6/19, Norway addresses deficiencies at installations after five years of operation and it is concluded that undetected deterioration is one reason. However, it is not explained if and how maintenance instructions and measures to detect SCR deterioration at an early stage were implemented under the  $NO_X$  Fund. Frequent maintenance and inspections of SCR systems, comprising of spot check measurements as well, would provide in due time a deterioration trend which permits maintenance and corrective action by the ship's operator before the reduction efficiency moves out of target.
- FUROMOT is of the view that conclusions from measurements of ships under the Norwegian  $NO_X$  Fund should not be confounded with those of ships certified under MARPOL Annex VI. As explained above, very different requirements apply under the two schemes for the approval and for the onboard verification procedure. EUROMOT would like to recommend that Member States and international organizations could be invited to report experiences with the operation of engine/SCR-systems certified under MARPOL Annex VI.

## **Action requested of the Sub-Committee**

8	The Sub-Committee is invited to consider the information provided and to take action
as appro	ppriate.