



Implementation of EPR recommendations related to transport and environment MONTENEGRO

Budva, Jun 2019



MARPOL Annex VI


Third EPR Montenegro - Recommendation 5.4:

The Ministry of Transport and Maritime Affairs, in cooperation with the Ministry of Sustainable Development and Tourism, should ensure the implementation of the Annex VI Prevention of Air Pollution from Ships of the International Convention for the Prevention of Pollution from Ships (MARPOL).



MARPOL Annex VI

- MARPOL Annex VI, first adopted in 1997, limits the main air pollutants contained in ships exhaust gas, including sulphur oxides (SO_x) and nitrous oxides (NO_x), and prohibits deliberate emissions of ozone depleting substances (ODS).
- MARPOL Annex VI also regulates shipboard incineration, and the emissions of volatile organic compounds (VOC) from tankers.
- The limits applicable in Emission Control Areas for SO_x and particulate matter were reduced to 0.10%, as of 2015.
- Of total global air emissions, shipping accounts for 18 to 30% of the NO_x and 9 % of SO₂

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- Under the revised MARPOL Annex VI, the global sulphur limit in marine fuels will be reduced from current 3.50% to 0.50%, effective from 1 January 2020
 - DIRECTIVE (EU) 2016/802 relating to a reduction in the sulphur content of certain liquid fuels (May 2016)
 - Decree on limit values of polluting substances in liquid fossil fuels, Montenegro (March 2017)



MARPOL Annex VI - ECAs


Emission control areas

- SO_x and PM emission control
 - Baltic Sea
 - North Sea
- NO_x, SO_x and PM
 - North American Area
 - Atlantic coasts of US, Canada, and France and the Gulf of Mexico coast of US
 - Hawaiian Islands
 - Caribbean Sea (US)



MARPOL Annex VI

- In 2018 France presented the results of its impact assessment of a possible emission control area (ECA) in the Mediterranean Sea indicating that a combined ECA which addresses both sulfur and nitrogen oxides would have the greatest positive effect in reducing air pollution and bringing socio-economic and ecological benefits (Marine Environment Protection Committee 73rd meeting at IMO)
- Currently, the designation of a Mediterranean ECA is under consideration

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- Decree on limit values of polluting substances in liquid fossil fuels, Montenegro (March 2017), Art 13
 - All vessels entering Montenegrin territorial waters have to switch to low-emission fuels (0,5% as of 2020) before the entrance and enter in their log-books the fuel-changeover operations.
 - Ships at berth in Montenegrin ports are not allowed to use fuel with more than 0,1% m/m of sulphur.



The Most Popular Cruise Ports in the East Mediterranean

- Dubrovnik
- Kotor
- Venecija
- Santorini
- Rodos



More than 500 cruising ships visits Kotor during the summer.

Of total global air emissions, shipping accounts for 18 to 30% of the NO_x and 9 % of SO₂

Boka Bay





Implementation

- Monitoring of marine fuel quality (suppliers) according to the annual Programme for fuel quality monitoring (as of 2017)
- Inspection of fuel quality at 20% of ships:
 - inspection of ships' logbooks and bunker delivery notes;
 - sampling of the marine fuel in sealed bunker samples;
 - sampling and analysis of the sulphur content of marine fuel on-board.



Implementation

European Maritime Safety Agency (EMSA) trainings

- EMSA Training in Lisabon (April 2018)
- Montenegro supported to participate to the Paris MoU 65th Port State Control Seminar in Copenhagen (June 2018)
- Montenegro supported to participate in the Paris MoU Expert Training “Safety and Environment” Scheveningen, the Netherlands, (March 2019)
- Montenegro (September 2019)
 - sampling of the marine fuel in sealed bunker samples; sampling and analysis of the sulphur content of marine fuel on-board.

Air quality monitoring

- Installation at the new monitoring site in Kotor (Boka Bay) is on-going
- The new AQ station will monitor impact of both maritime and road transport.

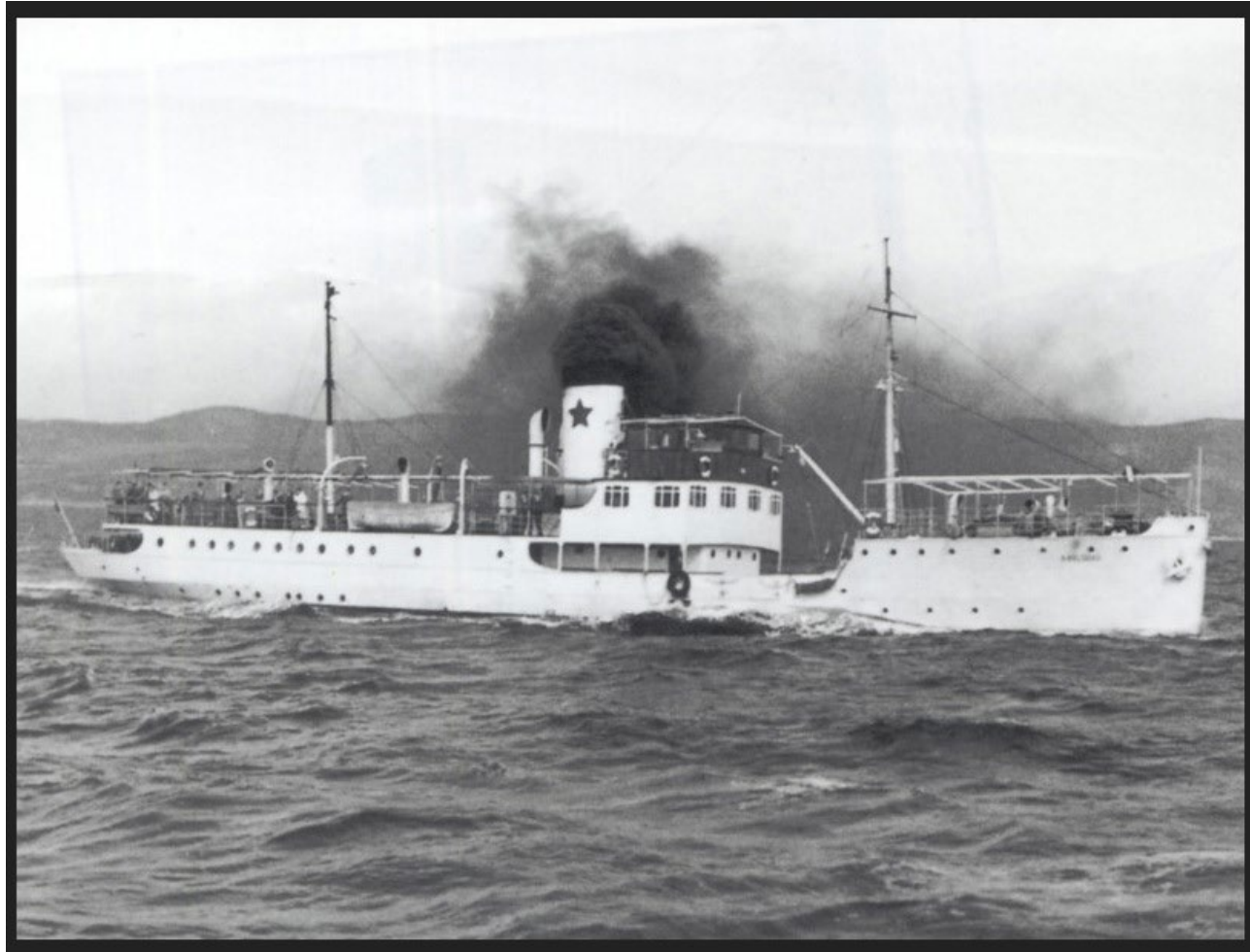


Air quality monitoring

- Results from Bar (Port of Bar)
- During the period 2009-2018 annual concentrations of NO₂ and SO₂ were lower than lower assesment treshold.



This is the past





Thank you!