

OIL FORUM 2019

Implementation of fuel quality standards –
Montenegrin experience

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MILESTONES

- Law on air protection 2010
- Regulation on limit values of polluting substances in liquid fossil fuels 2011
- First annual Programme for fuel quality monitoring 2011
- Ratification of MARPOL Annex VI 2013
- Rulebook on fuel quality 2015/2016
- New Sulphur in fuels Directive 2016
- New Regulation on limit values of polluting substances in liquid fossil fuels 2017

Sulphur content in fuels

- heavy fuel oil 1,00 % by mass
- gas oil 0,1 % by mass

- marine fuel 3,5% by mass
 - marine diesel oil 1,5% by mass
 - marine gas oil 0,1 % by mass
- marine fuel 0,5% by mass as of 1st January 2020

MONITORING

- Automotive fuel
 - Annual programme
 - Standard EN 14274 (FQMS)
 - Model C (less than 300.000t)
 - 50 samples of each type of fuel per season (pump stations)
 - + storage (importers)
- Marine fuel
 - inspection of ships' logbooks and bunker delivery notes
 - analysis of MARPOL sample (sealed bunker sample)
 - sampling on-board
 - 20% of ships (avg. number in 3 years)
 - + storage (importers)

Monitoring

- Automotive fuel
 - Polluter pays
 - Accredited laboratory – sampling and analysis
 - Environmental Protection Agency prepares the programme
 - Environmental inspection
- Marine fuel
 - Port authorities
 - Accredited laboratory – sampling and analysis
 - Marine safety inspection (Bar & Kotor)
 - Environmental inspection for importers/distributors

Consumer protection

Automotive fuels

- Control of additional parameters (e.g. water)
- Market inspection
- Accredited laboratory



Cooperation with EMSA

- 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.

EMSA workshop Montenegro



MARPOL

- 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).
- The limits applicable in Emission Control Areas for SO_x and particulate matter were reduced to 0.10%, as of 2015.
- 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 1st January 2020

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)

ECA in Mediterranean Sea?

- In 2018 (Marine Environment Protection Committee 73rd meeting at IMO) France presented the results of 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
- Italy strongly supported the initiative at preparatory meeting (July 2019, Roma) for COP Barcelona Convention, Naples December 2019
- Currently, the designation of a Mediterranean ECA is still under consideration

Boka Bay



More than 500
cruising ships visit
Kotor during the
summer

All vessels entering Montenegrin territorial waters have to switch to low-emission fuels 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.



Lovćen *1657m*

Sinjalo *1725m*

1725m

RISAN

PERAST

KOTOR

TIVAT

GRBALJ

BUDVA

HERCEG
NOVI

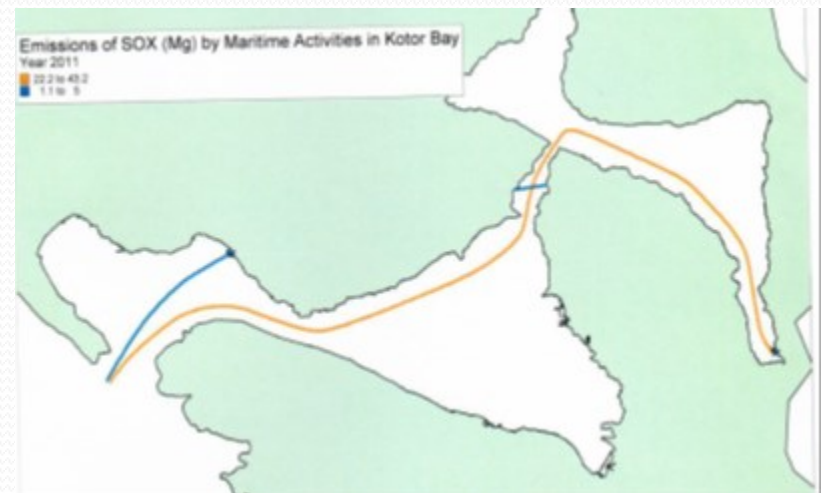
LUSTICA

KRTOLE

ATIA

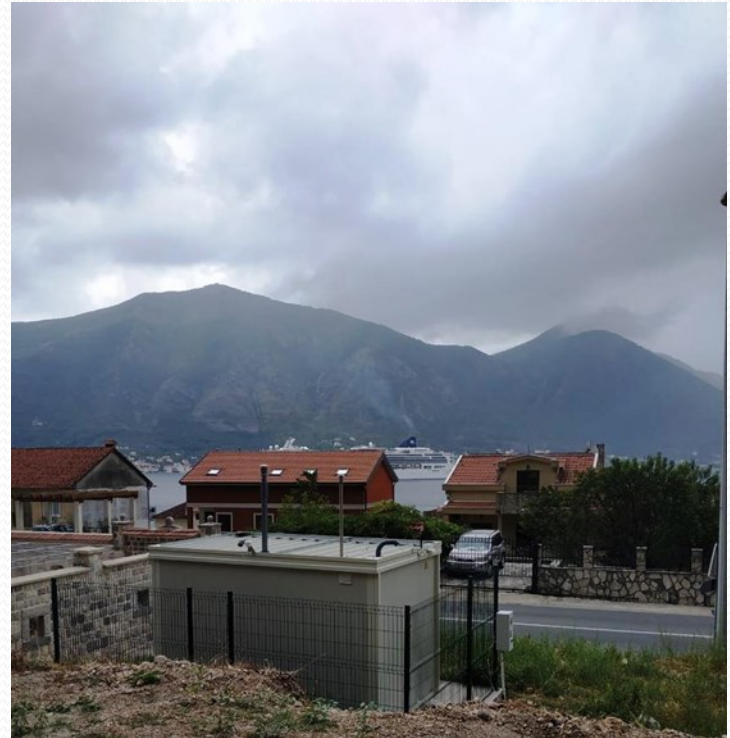
Impact on air quality

- Of total global air emissions, shipping accounts for 18 to 30% of NO_x and 9 % of SO₂
- During the period 2009-2018 annual concentrations of NO₂ and SO₂ in Bar were lower than lower assessment threshold(LAT)

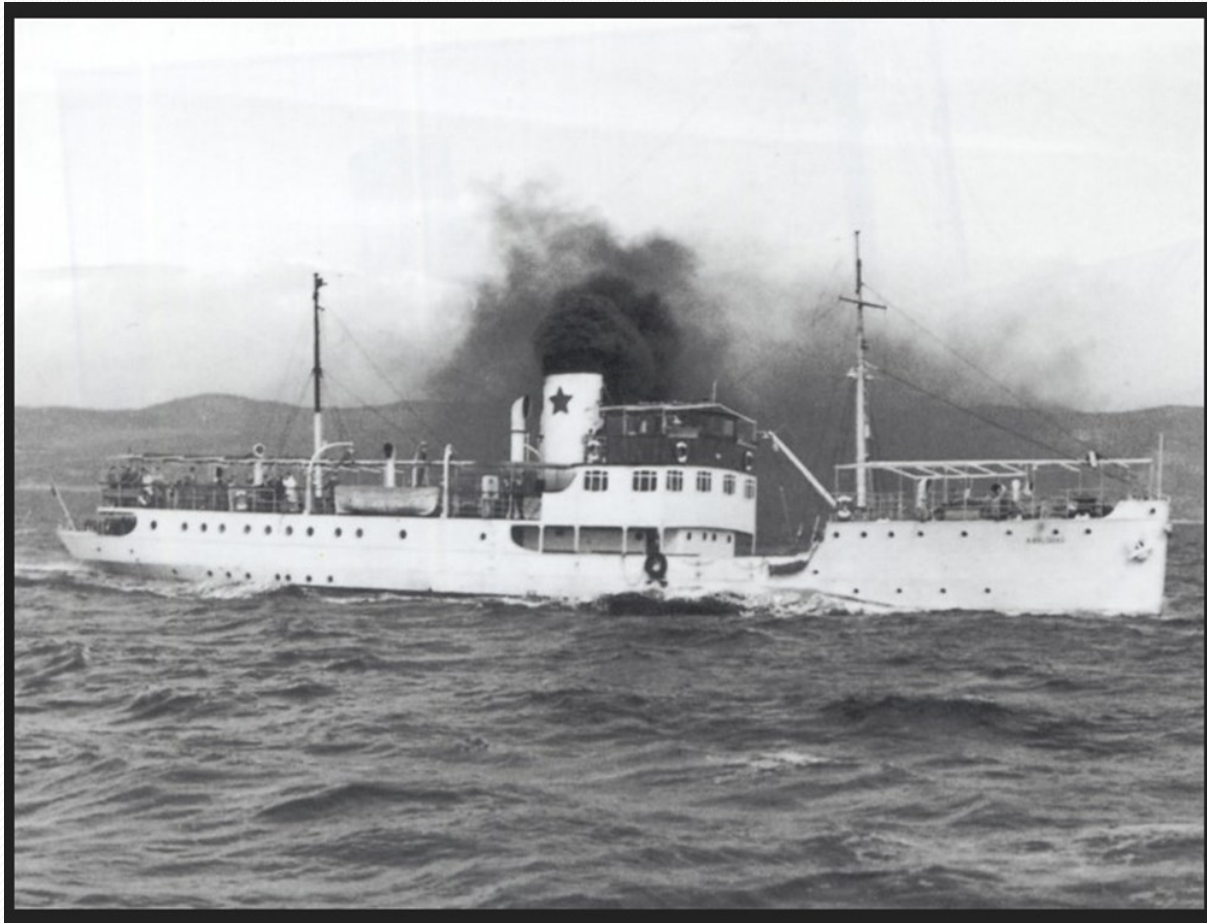


KOTOR AQ Station

- Within the new composition of the air quality monitoring network in Montenegro (september 2019) there is a new automatic station placed in Kotor to monitor impact of both maritime and road transport.



This is the past





Thank you!

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