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 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 (SOx) and nitrous oxides (NOx), and prohibits deliberate emissions of ozone depleting substances (ODS).
- The limits applicable in Emission Control Areas for SOx 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
- SOx and PM emission control
  - Baltic Sea
  - North Sea
- NOx, SOx 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.
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.
Impact on air quality

- Of total global air emissions, shipping accounts for 18 to 30% of NOx 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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