

Enforcement 2020 - regional and global perspectives

Symposium on IMO 2020 and Alternative Fuels, 17-18 October 2019

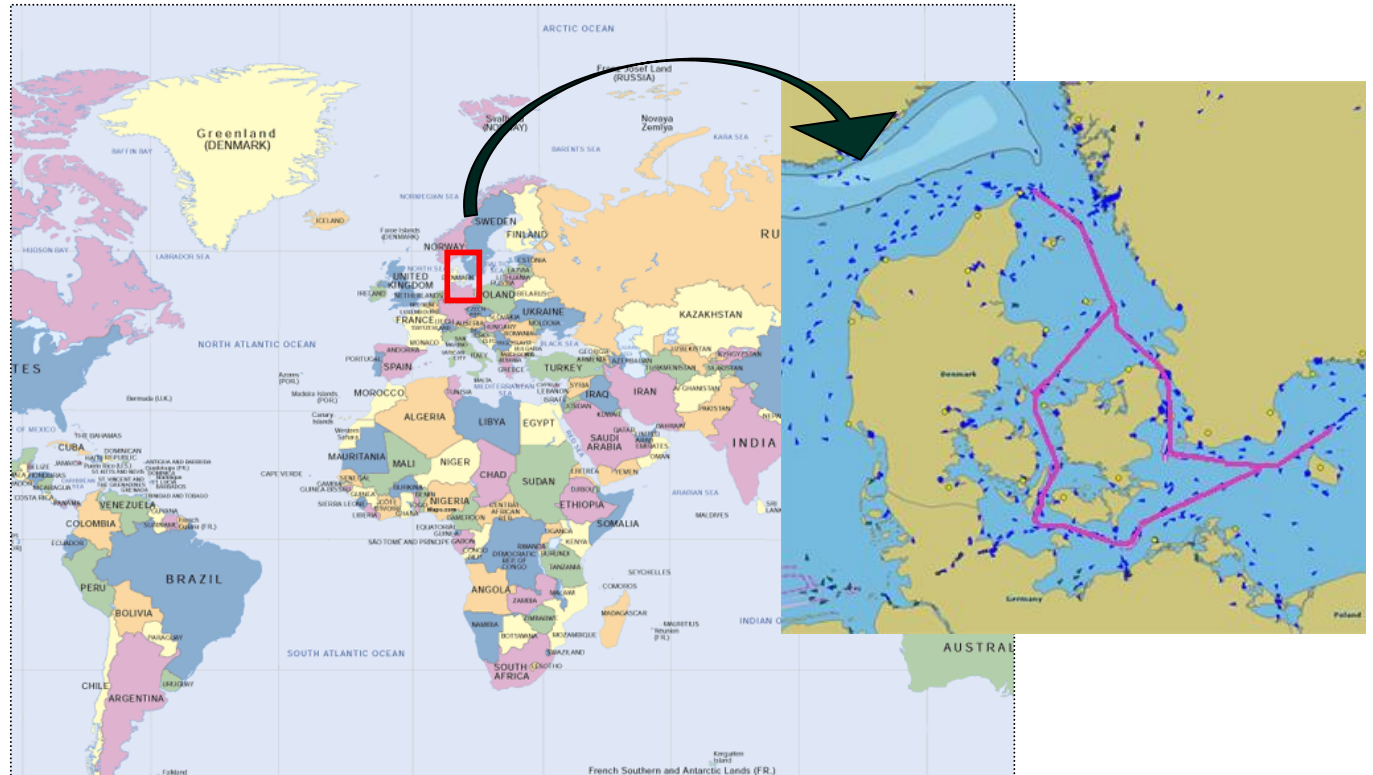


**Ministry of Environment
and Food of Denmark**

Denmark as a Coastal and Port State



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Enforcement

Fuel oil suppliers (Port/Flag States):

- Register of local suppliers of fuel oil
- Require that the fuel oil suppliers provide BDN and MARPOL-sample
- Encourage availability of compliant fuel oil
- Inform IMO and EU about fuel oil suppliers not complying with the requirements
- Sampling during delivery (EU)



Enforcement

Ships (Port/Flag State):

- Document inspection (BDN etc.)
- Fuel oil sample (EU)
- Guidelines for the control of scrubbers
- Information gathering and exchange (THETIS-EU/IMO-GISIS)
- “Targeting”
- Fuel oil sampling from fuel oil tanks
- Fuel oil ban (1 March 2020)



'Sniffers'

➤ **Great Belt Bridge – contract with Chalmers**



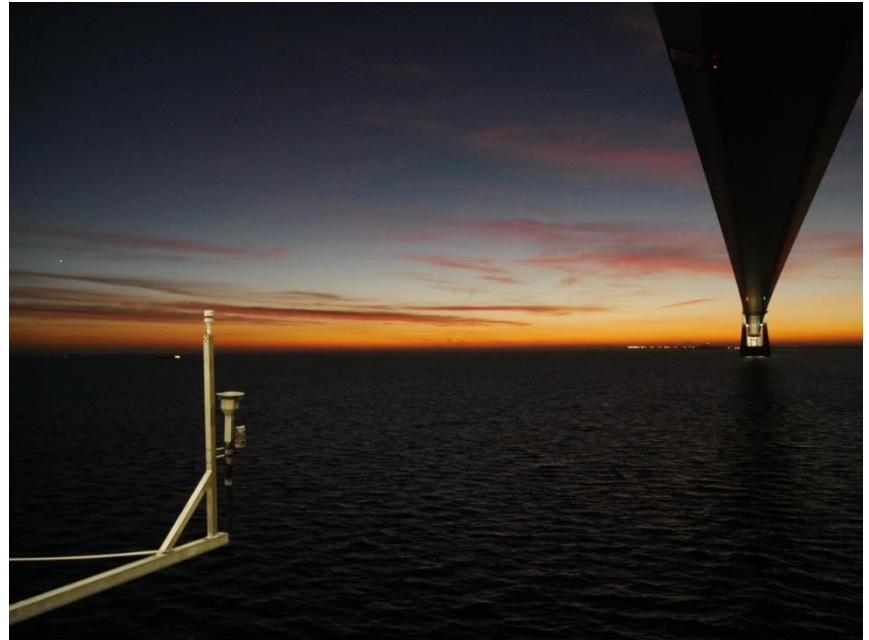
➤ **Air surveillance – contract with Explicit**



Status

Status on the SECA experiences in Denmark:

- **approx. 95% of the ships comply with the regulation (92-97%)**
- **Only a few serious non-compliances (>0.5% sulphur)**
- **Sulphur content in the air is reduced more than a half**
- **Legislative proposal on publication of gross non-compliant ships**
- **2020: 0.5% global (outside SECA)**



Enforcement

Contract with Saybolt Denmark (laboratory)

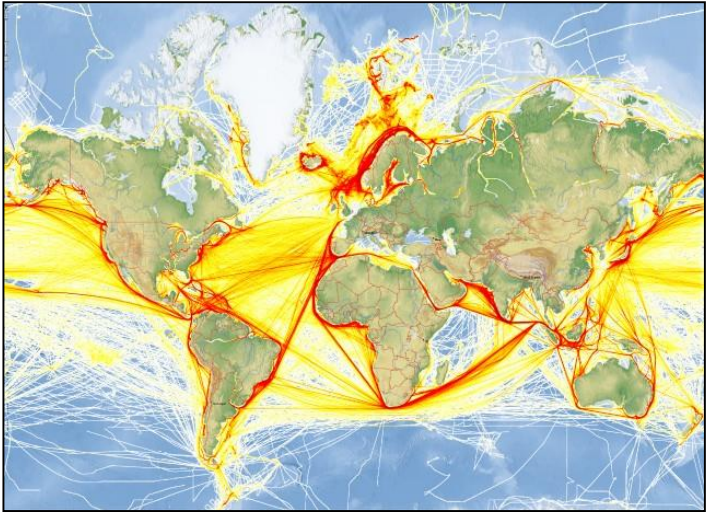
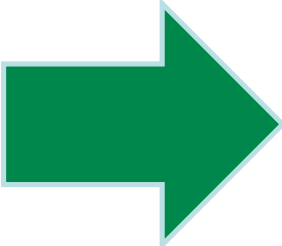
- DMA sends the fuel oil samples to the lab
- The results of the test analysis are sent to EPA

Action:

- Test results are registered in the THETIS-EU
- If the results are in violation of the sulphur regulation, a non-compliance alert is set up and DMA is informed
- Minor exceedances (0.11%) EPA will send an enforcement notice
- Exceedances of 0,12% and above are reported to the police



Denmark as a Flag State – the global enforcement challenge



Preparations – the IMO and beyond

IMO 2020

Taking bold action to clean up shipping emissions by reducing the sulphur content in ships' fuel oil

HOW?

0.50% reduced from 3.50% – significantly less sulphur permitted in ships' fuel oil

77% drop in overall SOx emissions from ships (2020-2025)

WHEN?

• From **1 January 2020**

AIR POLLUTION & HEALTH

- Premature deaths avoided
- Significant reduction in shipping's negative effect on human health through air pollution

Reductions in:

- stroke
- asthma
- cardiovascular disease
- lung cancer
- pulmonary disease

Cutting sulphur emissions helps prevent acid rain, which means:

- less harm to crops, forests and aquatic species
- tackling ocean acidification

WHERE?

- Health benefits felt globally
- Strongest in coastal communities
- Major impact in vulnerable areas

IMO 2020 - FAQs

What is the sulphur 2020 limit?

From 1 January 2020, the limit for sulphur in fuel oil used on board ships operating outside designated emission control areas will be reduced to 0.50% m/m (mass by mass), from 3.50% m/m.

This limit is set in Annex VI of the International Maritime Organization (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL).

How can ships comply?

- i) Use a compliant fuel oil with a sulphur content that does not exceed 0.50%
- ii) If exceeding 0.50%, use an equivalent e.g. an Exhaust Gas Cleaning System ("scrubber")
- iii) Use an alternative fuel e.g. LNG, methanol
- iv) Use onshore power supply when at berth

What must ships do before 1 January 2020?

Ship operators and owners must plan ahead. IMO has issued guidance, including ship implementation and planning guidance.

Who is responsible for enforcement?

Monitoring and enforcement of the new limit falls to Governments and national authorities of Member States that are Parties to MARPOL Annex VI.

Flag States (the State of registry of a ship) and port States have rights and responsibilities to enforce compliance.

What is IMO doing to help implementation?

IMO has been working with Member States as well as the shipping industry, bunker suppliers and refiners to identify and mitigate transitional issues so that ships may meet the new requirement.

A range of guidance has been developed, including specific port State control guidelines and guidelines on consistent implementation.

Are there any exemptions?

If a ship simply cannot obtain compliant fuel oil, they can complete a Fuel Oil Non-Availability Report (FONAR). This can be taken into account by port State control, but is not an exemption.

Where can I find out more?

A list of IMO measures to support implementation of the 0.50% limit can be found opposite. ➡

Please visit www.imo.org for further information.

IMO Instruments

Relevant (non-exhaustive) list of IMO instruments:

TREATY

- MARPOL Annex VI regulation 14, including the 0.50% sulphur limit from 1 January 2020
- Amendments to MARPOL Annex VI (Prohibition on the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship), enter into force from 1 March 2020 (MEPC.305(73))

IMPLEMENTATION

- 2019 Guidelines for consistent implementation of 0.50% sulphur limit under MARPOL Annex VI (MEPC.320(74))
- Guidance on the development of a ship implementation plan for the consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI (MEPC.1/Circ.878)

BEST PRACTICE

- Guidance on best practice for fuel oil purchasers/users for assuring the quality of fuel oil used on board ships (MEPC.1/Circ.876)
- Guidance on best practice for fuel oil suppliers for assuring the quality of fuel oil delivered to ships (MEPC.1/Circ.875/Add.1)
- Guidance for best practice for Member State/Coastal State (MEPC.1/Circ.884)
- Delivery of compliant fuel oil by suppliers (MSC-MEPC.6/Circ.16)
- Interim recommendations to enhance the safety of ships relating to the use of oil fuel (MSC.465(101))

PORT STATE CONTROL / SAMPLING

- 2019 Guidelines for port State control under MARPOL Annex VI Chapter 3 (2019 PSC Guidelines) (MEPC.321(74))
- Guidance for port State control on contingency measures for addressing non-compliant fuel oil (MEPC.1/Circ.881)
- 2019 Guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships (MEPC.1/Circ.364/Rev.1)

OTHER CIRCULARS

- Early application of the approved amendments to the verification procedures for a MARPOL Annex VI fuel oil sample (MEPC.1/Circ.882)
- Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the Exhaust Gas Cleaning System (EGCS) fails to meet the provisions of the 2019 EGCS Guidelines (MEPC.259(68)) (MEPC.1/Circ.883)
- Reporting of availability of compliant fuel oils in accordance with regulation 18.1 of MARPOL Annex VI (MEPC.1/Circ.880)
- Reporting of data related to fuel oil availability and quality in GISIS to promote greater understanding of the consistent implementation of the 0.50% m/m Sulphur limit under MARPOL Annex VI (MEPC.1/Circ.887)

Sharing regional experiences with the world

International workshops on Sulphur Enforcement

Sharing of enforcement experiences from SECA regions

- Detections
- PSC
- Sanctions
- Data sharing
- Etc.



Thank you for your attention!

