

New IMO marine fuel regulations in the Baltic Sea

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**Seminar on the impact of the
new IMO marine fuel regulations
on transport in the Baltic Sea**

Palle Kristensen
Ship Surveyor
Danish Maritime Authority



Relevant legislation

- MARPOL, Annex VI.
- EU Directives: 1999/32/EC, amended by 2005/33/EC.
- Act on the Marine Environment, Consolidated Act no. 929 of 24 September 2009.
(Ministry of the Environment)
- Order on Sulphur: Order no. 1663 of 14 December 2006 – into which the EU Directives have been incorporated.
(Ministry of the Environment)

Relevant legislation

- Act on the Marine Environment, chapter 10, section 32, provides the statutory basis for the Minister of the Environment's power to lay down requirements on marine fuel and air pollution restrictions.
- The Order on Sulphur (needs updating) implements the EU Directive as well as MARPOL, Annex VI.

History of IMO Annex VI

- MARPOL Annex VI was written in the early 1990s.
 - Global limit of 4.5% sulphur in the fuel oil.
 - SECA limit of 1.5% sulphur in the fuel oil.
- Adopted in 1997.
- Entry into force in 2005.
- First SECA – Baltic Sea – 19 May 2006 – more that 10 years after the limits had been adopted.
- Immediately after the entry into force, a revision of the Annex was started.
 - A lot of proposals were reduced to 3 models.
- It was extremely difficult to obtain consensus.
 - The result was a mix of all 3 models.

Sulphur content of marine fuels (according to MARPOL Annex VI , regulation 14)

Global:

The sulphur content of marine fuels must not exceed:

- 4.50% until 1 January 2012.
- 3.50% from 1 January 2012.
- 0.50% from 1 January 2020 (possible postponement until 2025).

SECA/ECA:

- 1.50% until 1 July 2010.
 - 1.00% from 1 July 2010.
 - 0.10% from 1 January 2015.
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Was the ECA limit of 0.1% sulphur necessary?

- Particles (PM) and SO_x content in the exhaust gas.
 - Most of the PM is SO_x when the sulphur content in the fuel is high.
 - Constitutes a health threat in port areas and close to the coast.
 - PM cannot be removed by filters when the sulphur content is above 0.1%.
- SO_x limits have already been enforced in several national/regional regulations.
 - EU Directive 1999/32 (2005/33) – 0.1% at berth in Community ports.
 - CARB 0.10% within 24 nm from the coast in California from 2012.
 - IMO approved an ECA 200 nm from the US/Canadian coast from 2012.
- **The 0.10% limit was necessary to re-establish the IMO authority within regulation of air pollution from ships.**
- BUT 0.10% might imply a modal shift in some services.

Fuel quality

- According to MARPOL Annex VI, the Administration is to keep a record of local fuel suppliers.
- To ensure that the sulphur percentages are not exceeded, the ships must have a bunker delivery note containing information about, among other things, the supplier and the sulphur percentage of the fuel. The bunker delivery note must be accompanied by an oil sample so that, in case of doubt as regards the sulphur percentage, it is possible to examine whether the supplier has supplied the right fuel oil.
- The bunker delivery note must be kept on board the ship for at least 36 months and the oil sample must be kept for at least 12 months from the date of delivery.
- Power to detain ships not in compliance with the sulphur requirements.

EU/national regulations

- Maximum 0.1% sulphur in marine gas oil (from January 2008).
- Maximum 0.1% sulphur in all fuel used when at berth (from 2010).
- Re the latter: This does not apply to ships due to be at berth for less than two hours, according to published timetables, as well as to ships which switch off all engines and use shoreside electricity while at berth in ports.
- It is required that the time of all fuel changeover operations is recorded in the ships' logbooks.

EU Regulation

- Recommendation on the safe implementation of low sulphur fuel by ships at berth in EU ports from 1 January 2010 – dated 21 December 2009.
- The recommendation grants a maximum deadline of 8 months from 1 January 2010 to ships that are, for safety reasons, not yet able to comply with the requirement for a sulphur content of 0.10% by mass for fuels used in port.
- The Environmental Protection Agency will enforce the requirement for 0.10% by mass for ships in Danish ports in the light of the special conditions of the industry and on the basis of the Commission's recommendation of 21 December 2009.
- In this connection, an agreement with a supplier to replace the necessary parts must be available. Each individual ship must carry documentation of the exchange arrangements and the Class approval on board so that it is possible to check it at an inspection.

Equivalents

- 2005/33/EC, article 4c.
- Lay down regulations on tests and use of new technologies for emission reduction.
- MARPOL, Annex VI, regulation 4.
- Equivalence provision allowing the Administration to grant permission to use alternative technologies or fuels on the condition that they are at least as effective in terms of emissions as the requirements stipulated in regulations 13 and 14.
- Section 18 of the Order on Sulphur stipulates that waste generated from the use of such emission-reducing technologies must not be discharged in Danish territorial waters.

MARPOL, Annex VI, regulation 18

- According to para. 2.1, a ship found by a Party not to be in compliance with the standards for compliant fuel oils set forth in this annex, the competent authority of the Party is entitled to require the ship to prove that the ship has done everything in its power to receive “compliant fuel”.
- This has been interpreted as if regulation 18 will now open up for permitting navigation on high sulphur oil in ECA under certain conditions.

MARPOL, Annex VI, regulation 18

- The Danish Environmental Protection Agency is of the opinion that the new regulation 18 in the revised Annex VI of MARPOL 73/78 on the availability of fuel oil does not have any effect on the regulations on SECA areas stipulated in the Order on Sulphur in force at any time. Regulation 18 only states some of the conditions that member States must consider in an overall assessment of specific cases where the sulphur limits have been exceeded. Since there has not been any problems with the availability of low sulphur oil in the existing SECA areas, this is not expected to be a problem in the future.

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- Thank you for your attention.