Sulphur Emission Control Areas (SECAs) have been introduced inter alia by the European Union in order to reduce air pollution from the shipping sector immediately and effectively. As of January 1st 2015 ships which are operated in the North and Baltic Sea or the English Channel are obliged to switch to low sulphur distillates with a maximum sulphur content of 0.1% or to install scrubbers as exhaust gas cleaning technology. Such a step became necessary as all major sources on land are meanwhile regulated and have to limit their emissions significantly while the shipping sector and its share of greenhouse gas and air pollutant emissions is steadily growing. Next to its negative impact on global warming and ecosystems it is estimated that shipping emissions cause approximately 50,000 premature deaths and 60 billion EUR in health costs every year in the EU1.

While it is for sure that a switch to low sulphur fuels results in a significant reduction of air pollutant emissions, scrubbers are more questionable and only a combined system of particulate filters and SCR catalysts can guarantee the urgently needed reduction of particulate matter, soot and nitrogen oxides which threaten human health. Nevertheless SECAs are a highly appreciated step towards greener shipping as long as a consistent global solution via United Nation’s International Maritime Organisation (IMO) is not in place. Accordingly, the Mediterranean Sea should be designated a SECA as soon as possible too.

Since the European Sulphur Directive (2012/33/EU) sets the standards for ship fuel’s sulphur content it is important to guarantee its proper surveillance, enforcement and compliance by the member states. As of now only little information on SECA compliance is available but it shows that surveillance and enforcement are only rarely in place and several mechanisms are at work which give reason to doubt that all ships sailing the European SECA comply: There is a lack of surveillance, a lack of international cooperation and cohesion regarding potential fines and a significant economic advantage for those who use the dirtier but cheaper fuel.

So far only a very limited number of SECA violations have been reported but this does not necessarily mean that most ships comply indeed. In fact there are some effects in place that cause a massive bias. First, ships are only controlled while at berth but not when sailing the SECA. So the chance is almost zero to detect a ship that runs on HFO but is just passing Northern European waters without calling a European port or more likely, leaving a European port and sailing all the way through the SECA to Asia. But even of those ships who do call a European port only a small share is inspected for its fuel quality. And if they were, fines are extremely low compared to the economic benefits which result from SECA violation. Moreover, it is the flag-states who are in charge of sanctioning ship owners for non-compliance and not all of them may have the interest or capacity to do so.

Although we witnessed a massive decrease in oil prices over the past twelve months the cost difference between low sulphur destillates and heavy fuel oil is still in place. Given the current price per ton of 220 US $ for HFO respectively 400 US $ for LSF ship owners may safe up to 15,000 EUR a day. At the same time the risk for being caught is relatively low and fines for violations start from 1,500 EUR in some European member states. Hence the economic benefit for non-compliance is significant it is likely to work as a strong incentive for cheaters generating relevant disadvantages for companies who operate their business according to the law. As this effect will lead to unintended market distortions it is not surprising that even major shipping companies and ship owners’ associations like the Trident Alliance including the global market leader Maersk and Hapag Lloyd or the Danish Ship Owners Association publicly demanded stricter surveillance schemes and higher fines for those how violate the rules.

It is elementary that the number of controls not only in ports but in particular on the open sea is increased significantly. Therefore, the respective authorities have to be equipped with an adequate number of staff as well as modern hard- and software. Moreover, it is mandatory, that not only the different authorities on national levels but also police, coast guard and other authorities of all member states co-operate regarding exchange of information as well as joint actions as part of surveillance operations. Next to an increasing number of high-sea patrols, drone or aircraft flights or mobile and stationary remote sensors (sniffers) is needed to guarantee a tight grid of SECA enforcement. Stiff penalties have to be imposed by the member states for those who do not comply.

NABU requests from German federal and state authorities:
- close monitoring at sea and in ports
- sufficient staff and equipment of authorities in charge for the control
- better co-operation between federal police and Coast Guard, incl. joint operations
- set fines in order to obtain a deterrent effect for non-compliance
- support of a global sulphur limit of 0.5% from 2020 on

NABU calls on the EU:
- improved co-operation between member states regarding controls and enforcement
- support of a proper surveillance scheme, incl. R&D of control technology
- transparency and exchange of information and data (THETIS-S publicly available)
- declare all European waters as SECA (Mediterranean Sea & Atlantic Ocean)
- standardization of fines with deterrent effect and profit levy at rule violations
- consider continuous monitoring and online reporting by pipe based devices

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