



■ **The regulator: Heiko Kunst, Policy Officer DG Climate Action, European Commission**

The European 2030 Climate and Energy Policy Framework has resulted in commitments

for emissions reductions [of 40% on 1990 levels by 2030] from various parties. But we should not forget that there are two sectors not covered by these commitments: the two international transport sectors, aviation and shipping.

I think it would be naïve to believe we can achieve these reductions while leaving out some of the contributors. Implementing these ideas two years ago, the Commission looked at various options for dealing with greenhouse gasses from shipping as this was at the time the only sector in Europe not regulated at all. It decided to start with MRV first, then discuss further measures at a later stage.

There are very good reasons for doing so. When we started dealing with the sector four years ago we had a first study estimating emissions of voyages to/from Europe, then two years later another study that supported our impact assessment for proposed MRV regulation. There was a difference in emissions figures of around 30%, which clearly showed that we don't have any idea about the amount of emissions we are talking about. So having an MRV system which delivers reliable data on the size of the problem we want to solve does make sense.

What is now at stake for us is setting up implementation legislation. On a global process we see a quite similar process with a little delay in the IMO, also discussing MRV - or a global data collection system - and with idea of taking further measures as a subsequent step. I think it will very important to work on interactions between these two processes in the next two to three years.

The regulation entered into force in July and the first deadline is for a set of implementing legislation. We are now in a stakeholder consultation phase which started before summer break and will run until spring next year. Then we will see the creation of a final text for implementing the legislation. We are confident that this legislation will be adopted before the end of 2016.

As for the obligations on ship owners, the first one is to prepare a monitoring plan for each ship describing how monitoring takes place. There is a choice of four methods from the very simple bunker delivery note approach to actual measurements. The owner makes a choice and the document is to be checked by a verifier which must first be accredited. Once monitoring plans are drawn up and approved, actual monitoring starts on 1 January 2018, with a deadline for reporting three or four months after the end of the calendar year.

Data will then be aggregated into annual figures reported to Commission. We are checking how the reporting process should be organised and hope to be ready for the first round of reporting in 2019. Reports will be prepared by owner, verified by a verifier and a

MRV: The devil in the detail

As the European Union regulation on the monitoring, reporting and verification (MRV) of CO₂ emissions from ships progresses, five stakeholders discuss the challenges ahead.

document of compliance issued - that is the only piece of the exercise relevant for enforcement activities by EU flag states and by member states in their function as port states.

The regulation obliges the Commission to publish the MRV results, which will be made publicly available. Information will include the identification of a ship, fuel consumption, emissions (six energy efficiency indicators) and I think that's it.

A global system would more effective and easier to implement for a globally active sector, but has not been available. There is a provision in the MRV stating that if there is a global agreement, we as the Commission should make a review of the European regulation and make proposals for the alignment of the systems.

First we need to know what the global system looks like. Europe and its member states are active in the IMO process, but we see it is not always easy to get people on board. There are 170 member states and you need to convince industry first because without industry nothing will happen.



■ **The ship owner: Anna Larsson, Head of Sustainability, Wallenius Wilhelmsen Logistics**

We been reporting fuel and CO₂ emissions since 2009, and it has not been a problem. Our concern is that the various cargo related measurements in the MRV proposal contain some real challenges, and that the energy efficiency measures resulting from it will not be seen as reliable or robust, or a good base for any decisions.

The amount of additional data is also daunting. The working paper on cargo carried features several parameters are not captured at all today such as lane meters.

We pay for our own fuel, and to minimize fuel and emissions is a commercial and environmental necessity. We need to be efficient across our processes and if we end up with an MRV that is complex and extremely costly, that will create real problems. What we look for is a fair and realistic way of calculating.

For us a manageable system needs to be consistent

globally. With different regional regulations and data requested, the risk is that similar terms and data points being defined differently will create a very complex and costly system. Our crew are meant to run their ships as safely and efficiently as possible - if you add data gathering it doesn't contribute to those aims. We are happy to report, and agree that we need to do something, but not in a way that is onerous to our operations.



■ **The verifier: Julien Dufour, CEO, Verifavia Shipping**

Third pillar of the MRV is verification, an important pillar which ensures credibility of the system by ensuring

that data reported by shipping companies is accurate and complete. The verifier role is threefold: to assess the conformity of monitoring in compliance with the MRV; to verify the data reported, to ensure with reasonable assurance that the procedures comply with emissions monitoring plan; and to issue a document of compliance that every ship will have to carry on board from 30 June 2019.

A lot of details remain to be confirmed. The Commission has set up two subgroups, one on monitoring and reporting, one on verification. Discussion will feed into the Commission's work on the rules of the MRV. However, although a lot is still to be done, there is already enough detail for shipping companies to start monitoring and recording data.

There are still some outstanding issues with regard to the technical role of verification, such as the independent data the verifier will use to crosscheck the completeness of the list of voyages reported by the shipping companies. The regulation talks about using AIS data but there is a lot of uncertainty over how to make this happen.

Verification will be carried out by independent accredited verifiers, who will have to be accredited by national accreditation bodies. The timeline for accreditation will be very tight, process won't start until the beginning of 2017, and first deadline is August 2017, so only a few months to accredit before

verifiers can start assisting.

The regulation may look complex but at the end of the day it is about data that most shipping companies already collect in their departure, noon and arrival reports. The monitoring plan describes what they are already doing to collect data, transfer it to an IT system and combine it in the way required. Most companies are already doing it even if they don't know it.

Verification is not that big of a deal either - it involves analysing data, redoing calculations, cross-checking and some basic statistical analysis to see if the data is plausible, complete, accurate. Verification fees will be based on market conditions and are fixed. I imagine the verification business will be competitive so you can expect very competitive rates.

Of course a global MRV is ideal but the European MRV is a good start. It's a first step so will hopefully pave the way for a global system to be designed by IMO in the future.



■ **The lobbyist: Anna Ziou, Policy Advisor, UK Chamber of Shipping**

Of our 150 members half are ship owners, managers or operators. The chamber is engaged in the development of the

MRV system, working closely with UK government. We are currently participating in the MRV expert groups developing rules for the regulation. I am chairing an expert group on other vessel types, will it apply to other vessels such as offshore.

The chamber supports a global, mandatory MRV regulated by IMO, as we believe it is the most appropriate way to achieve emissions reductions in global shipping. Lack of development at IMO has led

the industry to face a very costly and complex system. The verification of the monitoring plan and emission reports will be very costly.

The aim of the European MRV is to introduce a system that will accurately calculate emissions, and with plans to publicise the data there are concerns for confidentiality as well. The strategy is the first step for future reduction targets or market-based measures.

There has been some positive progress in the IMO this year, but concerns have been raised on the directions the two systems are heading in, and whether the Commission will be satisfied to fully align its system with what is decided at the IMO. Otherwise we may end up with two different systems and a huge compliance cost for the industry.

On the IMO side, there were expert working group recommendations agreed that deadweight can be used as proxy for ships' cargo, which we see as addressing issue of confidentiality. There is general agreement that data should not be disclosed to parties other than the administrations where the ship is registered. Other member states only have access to results of analysis, not the individual data. This addresses issues of concern and is more efficient administratively. Verification is also simpler than under the current European MRV.

On the European side, verification will have a huge cost to the industry. Just imagine if a verifier identifies something wrong with your monitoring plan or emission control, they will charge a fortune for every comment and correction. We are unsure what the final monitoring plan requirements will look like, but it seems quite demanding and requires a lot of effort from companies.

There are also concerns with recording data: one of our members could have 600-700 voyages to or from European ports in a year. Verification will also be a huge

effort; the verifier will find gaps and return again and again to the monitoring plan. For the emission reports, the verifier will be required to conduct spot checks on 5% of voyages, meaning that shipping companies will need to make available log books and fuel invoices (a confidential document). This will require copies of these documents for every single voyage.



■ **The monitoring equipment supplier: Larry Rumbol, Parker Kittiwake Procal**

We manufacture continuous emission monitoring systems. We will be looking for

transparency on a situation devoid of regulation at the moment. Ship owners and administration are not the best partners, so we hope that verification will be a simple system.

I think there is a danger of overcomplicating the issue. There are a lot of urban myths about data collection and a lot of talk about expensive monitoring. But the cost of a monitoring system is less than half the salary of an electrical technical officer.

It is quite possible today to monitor emissions and send the data ashore, verify them, and have an alarm by exception system as a global platform. That all exists today and I think we are in great danger of creating a very unwieldy paper chasing system if we are not careful.

Monitoring equipment can be installed for as little as US\$20,000 to US\$30,000 or even lower on large volumes. They can be very simple system - ours is in situ and requires no complex extraction, maintenance or crew involvement. The other options for monitoring in the MRV regulation are far more costly in terms of crew time.



Insights from industry stakeholders on the European MRV regulation were discussed during a roundtable chaired by Blue Communications' Alisdair Pettiigrew (third from left) and hosted by Norton Rose Fulbright partner Phillip Roche (second from left)