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PREPARING FOR THE MRV REGULATION

Relevant for owners and managers operating ships in European waters.

September 2016

The MRV (Monitoring, Reporting and Verification) regulation aims to quantify and reduce CO₂ emissions from shipping and will create a new kind of benchmarking system in Europe. DNV GL has prepared an overview of how MRV will affect the maritime industry and what shipping companies need to do to achieve compliance. This Technical & Regulatory News is a revised version of No. 19, 2015.

The regulation in a nutshell

The European Commission (EC) is bringing emissions from shipping into its 2009 climate and energy package. MRV is designed to progressively integrate maritime emissions into the EU’s policy for reducing domestic greenhouse gas emissions (EU regulation 2015/757). MRV requires ship owners and operators to annually monitor, report and verify CO₂ emissions for vessels larger than 5,000 GT and which call at any EU port. The results will be published on a regular basis. Entered into force on 1 July 2015, the regulation will become fully effective on 1 January 2018. Shipping companies will need to prepare a monitoring plan by 31 August 2017 at the latest for each of their ships that falls under the jurisdiction of the regulation. They will have to monitor and report the verified amount of CO₂ emitted by their vessels on voyages to, from and between EU ports and will also be required to provide information on energy efficiency parameters (see below). Data collection on a per-voyage basis will commence on 1 January 2018. Once the data is verified by a third-party organization and sent to a central database, presumably managed by the European Maritime Safety Agency (EMSA), the aggregated ship emission and efficiency data will be published by the European Commission by 30 June 2019 and then every consecutive year.
Timeline

- 31 August 2017 – Companies are to submit ship-specific monitoring plans to verifiers for approval
- 1 January 2018 – Per-voyage monitoring to start
- 30 April 2019 – Verified annual emission reports submitted to the EC
- 30 June 2019 – Emission data made publicly available by the EC

This cycle will then repeat for subsequent years.

Monitoring and reporting

Ship owners will have to monitor the following parameters on a per-voyage basis:

- Port of departure and port of arrival, including the date and hour of departure and arrival
- Amount and emission factor for each type of fuel consumed in total
- CO₂ emitted
- Distance travelled
- Time spent at sea
- Cargo carried
- Transport work

In addition to the companies reporting annually aggregated figures for the parameters, the data is to be used to calculate and report average energy efficiency.

The basis for the calculation of CO₂ emissions will be the fuel consumption for voyages starting or terminating at any EU port. Fuel consumption shall be determined and calculated using one of the following methods:

- Bunker Delivery Note (BDN) and periodic stock takes of fuel tanks
- Bunker fuel tank monitoring on board
- Flow meters for applicable combustion processes
- Direct CO₂ emission measurements

Verification

Accredited verifiers will have three key tasks:

1. To verify ship-specific monitoring plans (completeness, accuracy, relevance and conformity)
2. To verify that the annual ship-specific emission reports comply with the monitoring plans
3. To verify that the figures contained in the annual ship-specific emission reports are accurate

Presently, no companies have been granted accreditation, as criteria remain under development by the EC. DNV GL, along with other companies, is in the process of becoming an accredited verifier for the EU MRV regulation.

Outstanding issues

At the end of July, the EU published the legal documents, i.e. implementing and delegated acts for the public hearing process. These documents contain most of the practical details necessary for the regulation to work. They include, for example, the content of the electronic templates for monitoring plans and emission reports, and practical information on implementation that vessels and verifiers will have to fulfil. Final versions are expected to be published towards the end of the year. You will find updated information on our EU-MRV webpages.

As the legal documents do not cover all practicalities, the EC will also work on additional guidelines (within the ESSF) to clarify the remaining issues in the period up to summer 2017. Industry stakeholders, including DNV GL, have been providing feedback to the EC through the European Sustainable Shipping Forum (ESSF) and will continue to do so as the guidelines are developed.
What about the IMO?
This spring the IMO agreed to implement a global system for fuel consumption data that will provide global CO₂ emissions data. Monitoring and reporting on a per-ship basis is expected to start on 1 January 2019. While detailed technical development is still ongoing, the system and the date of its entry into force is expected to be agreed to in October of this year. The IMO system has many similarities to the EU system and may trigger an EU review of the MRV regulation, conceivably leading to changes aimed at aligning the EU MRV with the IMO systems. This process is politically complicated and will take time; we expect to see both systems operating in parallel, at least for some years.

Recommended actions for our customers
The practical impact of the MRV regulation on owners and operators is becoming clearer with the publication of the EU legal documents. However, some issues are not yet fully clear and will likely not be so before summer 2017. Nevertheless, it would be advisable for ship owners and operators to prepare for MRV ahead of time and start considering how to best fulfil the forthcoming monitoring and reporting obligations for their own ship as well as their shore systems and routines. Steps such as developing the mandated monitoring plan (due at the end of August 2017), as well as examining how to best collect, aggregate and report fuel consumption and transport work data, are particularly important.