

UP IN SMOKE

Fuel Monitoring A Must For MPV Operators

July 1, 2015, after a two-year legislative process, Regulation (EU) N°2015/757 on the Monitoring, Reporting and Verification for ships, or Shipping MRV, entered into force. The regulation applies to most ships worldwide exceeding 5,000 gross tons, regardless of flag, that call at European Union ports for commercial purposes.

Multipurpose and heavy-lift ship operators have until August 2017 to prepare and submit to an accredited verifier for assessment a monitoring plan describing the procedures, systems and responsibilities in place to monitor fuel consumption, carbon emissions, cargo carried, distance, time at sea and energy

efficiency parameters. These parameters must then be monitored for each ship and each voyage to, from and between EU ports starting in 2018, and reported in an independently verified emissions report to the commis-



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sion and the flag state by April 2019 for the first time. Finally, by June 2019, all ships touching an EU port must hold a document of compliance delivered by the verifier that will be subject to inspection by port state authorities.

To monitor fuel consumption for each emission source onboard, shipping companies can select one or a combination of four standard monitoring

methodologies involving amount of fuel onboard, bunker delivery data, fuel flow data and direct emissions measurement. To determine the cargo carried and calculate the transport work, the regulation only specifies the methodologies for passenger ships, containerships and roll-on, roll-off ships.

This leaves the decision on the determination of cargo carried for other types of ships to the implementing acts, pursuant to the Regulation 2015/757, that are expected to be published in 2016, following an ongoing consultation process at an expert group set up by the commission.

FAIR COMPARISONS

The technical rules for the determination of cargo carried for specific types of ships should allow for a meaningful and fair comparison of the resulting energy efficiency parameters between ships of the same type. Multipurpose and heavy-lift ships are not specifically considered in the Regulation or in MARPOL Annex VI, but the discussions on bulk carriers and general cargo ships may be used as reference for the purpose of this article.

The challenge is to decide whether cargo should be expressed in mass or volume, in mass in combination with a correction factor, or in a combination of mass and volume. The use of the dead-

weight carried (displacement at loaded condition minus ship lightweight) is also considered to be a relevant option to recognize the fact that on laden voyages low-density cargoes require the ship to carry ballast water to optimize their loading, and this ballast should not penalize the energy efficiency parameter.

These options are being considered in light of a number of evaluation criteria: accuracy, uncertainty, verifiability, administrative efficiency and robustness for comparison purposes.

While it would be relatively straightforward for multipurpose and heavy-lift ships to report the mass of the cargo carried or the deadweight carried, it may be more difficult to determine the volume of cargo carried, unless a stowage factor is allowed to be used.

The outcome of the discussions will be published in the draft implementing acts and it may be expected that multipurpose and heavy-lift operators will have the choice between using mass (likely the preferred option), deadweight carried, volume or a combination of two parameters.

Another key issue of the regulation for multipurpose and heavy-lift ships is the identification of reportable voyages, considering that a voyage is a movement between two ports of call, with a port of call defined as a stop at a port to load or unload cargo with the exclusion of stops for other exclusive purposes such as refueling. Indeed, these types of vessels are often involved in complex routings with multiple stops including ship-to-ship and offshore transfers, which may make the identification of reportable voyages and the determination of cargo carried a real challenge.

Although new and complicated, the EU's MRV regulation is now in force, and the time has come to take proactive measures to understand how to meet the requirements. Analyzing processes and procedures ahead of time to accurately identify any gaps will ensure that everything is on track to meet MRV compliance. **BB**

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