Challenges of Shipping MRV for multipurpose / heavy-lift vessels

MRV Regulation 2015/757 came into force on 1st July 2015 and is viewed as a first step towards cutting CO_2 emissions from maritime transport in the European Union (EU). From 2018, it will require operators of ships exceeding 5,000 GT to monitor, report and submit their independently verified carbon emissions on all voyages to, from and between EU ports.

Verifavia Shipping CEO, Julien Dufour explains what this means for multipurpose / heavy lift ship operators.

On 1 July 2015, after a two-year legislative process, the Regulation (EU) N°2015/757 on the Monitoring, Reporting and Verification (MRV) for ships 'Shipping MRV' entered into force. The Regulation applies to most ships worldwide exceeding 5000 GT, regardless of flag, touching an EU port for commercial purposes. Multipurpose / 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 during 2018 and every year thereafter, and reported in an independently verified emissions report to the Commission and the flag state by April 2019 for the first time. Finally, in 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 on-board, shipping companies can select one or a combination of four standard monitoring methodologies involving amount of fuel on-board, 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 ro-ro 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 on-going consultation process at an expert group set up by the Commission.

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 / heavy-lift ship 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 deadweight carried (displacement at loaded condition minus ship lightweight) is also considered to be a relevant option to recognise the fact that on laden voyages low density cargoes require the ship to carry ballast water to optimise their loading and this ballast should not penalise the energy efficiency parameter. These options are being considered in light of the evaluation criteria (accuracy, uncertainty, verifiability, administrative efficiency and robustness for comparison purposes).

Whereas it would be relatively straightforward for multipurpose / 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 / heavy-lift operators will have the choice between using mass (likely to be the preferred option), deadweight carried, volume or a combination of two parameters.

Another key issue of the Regulation for multipurpose / 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 refuelling. 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. Analysing processes and procedures ahead of time to accurately identify any gaps will ensure that everything is on track to meet MRV compliance.

Julien Dufour, CEO, VERIFAVIA SHIPPING www.verifavia-shipping.com twitter.com/verifaviamarine

About VERIFAVIA SHIPPING

VERIFAVIA SHIPPING is a worldwide independent accredited environmental verification, certification and auditing body for aviation and maritime transport. VERIFAVIA SHIPPING offers pre-verification services and GAP-Analysis audits of shipping companies against the requirements of the Regulation 2015/757 on the Monitoring, Reporting & Verification (MRV) of carbon emissions of vessels.