

Overview

The Verified Gross Mass or VGM amendment to the International Maritime Commission Organization's Safety of Life at SEA (SOLAS) convention, covering 171 member countries, will take effect on July 1, 2016. The amendment specifies the minimum requirements for the construction, equipment, and operation of ships to maximize their safety. Each member country must ensure ships sailing under its flag comply with the requirements of the SOLAS convention. These new amendments should help vessel operators make correct and safe vessel stowage decisions by accurately verifying the gross weight of packed containers before they arrive onboard the ship. When a vessel transports unverified weights of containers, there is much greater risk involved because the container stacks can collapse, damage the integrity of the vessel and this lack of stability places shore side workers in a precarious position for personal injury. Based on global survey results reported in December from the online shipping portal INTTRA, roughly only a third of respondents are ready to meet full compliance when the new container requirements take effect in July.

Requirements for weighing but no standards as to how!

Even though this new system will require the verification of container weights as a condition for loading packed export containers aboard ships, there are not global standards for the implementation of this process. However, these rules apply to all containers, tank containers, flat racks and bulk containers, and the scale used for weighing cargo will be calibrated and certified following local/national rules. If there is any issue by the carrier in regards to the weight, the container will not ship. There are two methods for weighing the verified container weight (VGM):

- 1. Method 1: Weigh the container truck with packed container cargo on a scale, and then subtract the weight of the truck, the driver, chassis, and the fuel**
- 2. Method 2: Weigh the cargo, dunnage, pallets, and other packaging contents, and add tare weight of the container**

Who is responsible?

The SOLAS amendments are a shipper's responsibility to verify the gross weight of the packed container using one of the methods mentioned above. If the shipper ignores VGM documentation, the cargo is in jeopardy of missing the booked vessel. The shipper must communicate the verified gross weight in writing by including it as part of the shipping instructions to the shipping company or through a separate communication. Through the new regulations, both the carrier and the terminal will rely on a shipper's "signed" weight verification, and will hold the shipper liable for any damages caused to the ship or cargo due to incorrect weight verification. A scenario like this one will press the limits of the current structure of insurance liability.

Carriers

So far, there is not much clarity as to how the carriers will incorporate the new SOLAS amendments into their operational processes, but U.S. based carrier groups seem to be getting more aggressive in preparation to meet the SOLAS requirements. For example, the Ocean Carrier Equipment Management Association (OCEMA), comprised of seventeen carriers, is currently mapping out a process to ensure the smooth transition of information between all entities involved – shipper, forwarder, carrier, and the

terminal. While this group was able to successfully help the industry to change the manifest submission process in 2004, it will be challenged to find an Electronic solution to submit the weight certification to the responsible party. But these new requirements will not let give the carriers any wiggle room because they cannot load a container that does not have a signed VGM. The biggest challenge for carries will be to receive the information in time for the weight being accounted for in the stowage plan. An even greater challenge arises as more terminals shift to an electronic data interchange to receive this information.

Electronic Data Interchange

An Electronic Data Interchange (EDI) infrastructure is becoming more commonly used among the shippers, freight forward, terminals, and carriers but currently there is not an e-solution for the weight verification. An electronic solution will support a smooth transition of data between all parties, submitting the VGM as a component of the shipping instruction or in a separate declaration. There have been a few initial steps of translating the legal requirements of SOLAS into operational processes, and there are also drafts of the specification of the data fields for the EDI message to submit VGM. INTTRA is leading this initiative to develop a solution for a consensus on technology standards for the digital documentation of VGM submissions. INTTRA created a forum to receive input from stakeholders from across the industry to assist in creating this system. Unfortunately, the timing of this process may not coincide with the July 1 deadline as the first meeting took place in December 2015.

Freight Intermediaries

There is some haziness in terms of weight verification that involves a forwarder. As the current regulation reads, the “shipper” must provide the VGM. However, in a situation where a forwarder loads a consolidated container, the forwarder may be responsible for providing the VGM for the consolidated container. For this reason, freight intermediaries are pushing for procedures similar to the implementation of the Automated Manifest System (AMS), ensuring the consolidator receives a weight certificate before any consolidation begins. As a result, the shipper has no choice but to verify the cargo weight before the consolidator will provide services. This proposition takes advantage of the LCL cut-off time at origin, giving consolidators more leeway to fill the container and provide the VGM to the carrier.

Terminals

If there is any doubt about the container weight, the verified gross mass of the container obtained by the terminal is the final measurement. These weighing methods will require calibrated weighing equipment available at every terminal, which is not now the case. For these shippers to meet weight compliance, they will need commercial certified weighing services or purchase weighing scales. It seems unclear if the terminals will be consistent in offering commercial weighing services because there are concerns that there is the shortage of weighing providers. Shippers that already weigh cargo onsite are already moving towards compliance, but these changes will force other shippers to modify their operational processes to meet these requirements through the procurement of scales or certified weighing services.

Port Congestion

While a system of “no papers equals no loading” appears to be coming online, there is still some ambiguity on what will happen to a container that arrives without VGM paperwork. The Maher terminal in the Port of NY/NJ is the only major U.S. terminal to voice a process. Unless the terminal receives VGM documentation in advanced via electronic submission, it plans to turn away the container. Without a plan to reject containers with uncertified weights, the process will lead to port congestion. Additionally, any weakness found in the intermodal infrastructure, inland transport, chassis management, or from cargo loads from larger ships may result in constant congestion as ports after July 1 because these new changes. But one of the biggest issues that may lead to congestion is that procedures from declaring weight may vary from port-to-port.

International response

The SOLAS convention defines the role of government as the compliance enforcer. Domestically, shippers are pushing to delay the implementation of these new regulations for up to a year to avoid any disruption of trade. A signatory nation can delay for a year as long as it informs the IMO. Even though the U.S. may request a delay, it does not mean that the implementation process is not happening. Russia will also seek a similar course of action. While the U.S. and Russia look for more time, China is in need of the government intervening to ensure there is not a major supply chain disruption in the container industry. Currently, China is not doing much to incorporate the new changes to weight verifications because its' shipping industry feel that weight compliance is already occurring. However, not every terminal in China has the equipment to meet these measurement standards, and the government has no sense of urgency to address this problem or take a national stance. With a vast number of container originating in China, there are significant concerns and pressures that there may be supply chain disruptions throughout China.

While INTTRA is leading an international effort to standardize electronic submissions of shipping data, Japan and India are already taking national steps to implement the new standards. The Japanese government established protocols after drafting guidelines for the new weight verifications that will support a third party acting on behalf of the shipper and meet the international tolerance between $\pm 2\%$ and $\pm 5\%$. India's largest port in Mumbai seems to be ready to implement the new rules and will meet the VGM requirements by using rubber-tired gantry cranes. The Jawaharlal Nehru Port Trust accounts for 40% of the traffic in and out of India, and its terminals have successfully tested the new IMO requirements within its normal operations.

Conclusion

Alignment between industry partners is essential for the VGM data flow through the supply chain. These amendments will affect information needs, timelines, documentation and messaging. Although the implementation of the SOLAS convention by the July 1 deadline seems bleak at this time, initiatives are happening around the world. The challenge is whether the shipping industry can have cooperation from several moving parts to ensure a smooth transition to these new procedures. An important piece of this equation that can help shippers assume the responsibility of VGM will come as responsive national

governments incorporate the SOLAS amendments into law. Even though governments are also responsible for specifying margins of error like Japan, as well as describing auditing and accrediting procedures, they should not bear the sole responsibility to enforce the changes. As all the parties begin aligning their activities and make decisions to meet the deadline, it is crucial for all the legalities to transition successfully into usable and reliable processes.

OCEANAIR is ready to seamlessly comply with the new regulations and we are encouraging others in the industry to do the same! If you are facing particular issues, or have other questions not yet addressed, feel free to contact your OCEANAIR representative.

Will you be ready for the SOLAS amendments?