

Position Paper

Independent Verification of VGM: Enabling Safer Container Shipping

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Introduction

The Verified Gross Mass (VGM) requirement under the SOLAS Convention aims to ensure safe loading and stowage of containers aboard vessels. Yet in practice, the current system relies heavily on shipper-declared weights without independent verification, a gap that continues to pose risks to vessel safety, cargo integrity, and operational reliability.

Objectives and Intended Impact

This paper aims to highlight the safety, operational, and compliance risks posed by continued reliance on unverified VGM declarations and to build alignment around practical alternatives. In particular, the Container Ship Safety Forum (CSSF) seeks to raise the need for independent third-party VGM verification as a critical step toward safer container operations.

With this position, the CSSF aims to support industry-wide improvements in container safety, better compliance with SOLAS, and more consistent enforcement across jurisdictions. The CSSF hopes that the paper can broaden the industry dialogue and contribute to attention to the issue in relevant international and regulatory forums.

Background and Problem Statement

While SOLAS provides a global legal basis for VGM compliance, enforcement practices remain inconsistent and fragmented. Today, the responsibility lies with the shipper to declare the VGM, either by weighing the packed container (Method 1) or by summing the weights of individual cargo items and packaging (Method 2). In both cases, there is no standard requirement for independent verification.

This has led to persistent risks and inefficiencies, including:

- Widespread discrepancies between declared and actual weights (estimated in ~10% of containers)
- Incorrect stowage planning, which increases the risk of stack collapses and loss of containers at sea
- Limited ability for carriers and terminals to detect false declarations or intervene early
- Uneven national enforcement and lack of clear operational accountability

These gaps undermine the intent of the SOLAS regulation and create avoidable vulnerabilities in global container operations.

CSSF Position

The CSSF calls for a targeted and practical revision of current VGM practices, centred on one core principle: VGM must be verified by a neutral party before loading.

1. Independent Verification of VGM

The CSSF supports the implementation of a verified, independent weighing process for containers before loading. This process should not rely solely on shipper declarations.

2. Harmonized Enforcement and Oversight

The CSSF urge flag and port states to ensure consistent enforcement of VGM compliance, including defined tolerance limits and inspection schemes. A harmonized framework is essential to ensure maritime safety and accountability across the global supply chain.

3. Technical Neutrality with Clear Responsibility

The CSSF does not advocate for any single weighing method or technology. However, weighing must be performed by a third party to the shipper to ensure integrity and support sound stowage decisions.

Recommendations

To enable robust and independent verification of container weights in line with SOLAS requirements, the CSSF recommends the following:

1. Mandate operational readiness for independent weighing:

Stakeholders should ensure that procedures, infrastructure, and staff training enable on-site independent weighing of containers as part of standard operations.

2. Legal enforcement of non-shipper verification:

Regulatory authorities should require that VGM be verified by a non-shipper party, with consistent rules across flag and port states, including tolerance levels and spot-check mechanisms.

The CSSF encourages dialogue with stakeholders and welcomes opportunities to present this position in upcoming regulatory and industry forums.

Contact

For further information or to contribute to this initiative, please contact the CSSF Secretariat at secretariat@cssf.global.

**About CSSF**

Launched in 2014 and incorporated as a registered association in 2018, the Container Ship Safety Forum e.V. (CSSF) is an international industry association and global business-to-business network dedicated to improving safety performance and management practices in the container shipping industry.

CSSF members collaborate by measuring, reporting, benchmarking, sharing best practices, and engaging with key industry stakeholders.

The 30 ordinary member companies of the CSSF represent more than 45 percent of the worldwide available TEU capacity on fully cellular container vessels.