

DECEMBER 2015

# VERIFIED GROSS MASS INDUSTRY FAQs

*Implementation of the SOLAS amendments effective from 1 July 2016*



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# INTRODUCTION

This document has been compiled in response to questions that have been raised by the industry in relation to the revised SOLAS<sup>1</sup> regulation and the accompanying guidelines<sup>2</sup>.

The amendments to this regulation have substantial impact on operational practices between the parties in the international supply chain involved in the movement of containers by sea. While the convention relates to the safety of ships at sea, it should be recognised that shore based activities relating to the presentation of cargo are fundamental to safe outcomes at sea.

These FAQs relate to new mandatory rules, effective from 1 July 2016, concerning the requirement for shippers to verify the gross mass of a container carrying cargo. Without a verified gross mass the packed container shall not be loaded aboard ship. The rules prescribe two methods by which the shipper may obtain the verified gross mass of a packed container:

- Method 1, upon the conclusion of packing and sealing a container, the shipper may weigh, or have arranged that a third party weigh, the packed container.
- Method 2, the shipper or, by arrangement of the shipper, a third party may weigh all packages and cargo items, including the mass of pallets, dunnage and other packing and securing material to be packed in the container, and add the tare mass of the container to the sum of the single masses of the container's contents.
- In respect of both Method 1 and 2, the weighing equipment used must meet the applicable accuracy standards and requirements of the State in which the equipment is being used.



This document should be considered as dynamic; it is not intended to be comprehensive and other questions are likely to be raised in the future. Stakeholders are encouraged to discuss amongst their counter-parties how compliance will be achieved, particularly in relation to matters of a commercial nature.

These SOLAS amendments were adopted by the International Maritime Organization (IMO) in November 2014 and become mandatory on 1 July 2016. SOLAS itself has international legal status so there need not be any further implementing legislation for States that are party to the Convention. It should be recognised that national rules and regulations may exist and stakeholders should engage with the relevant Competent Authorities to obtain clarification on such national procedures.

All stakeholders have an incentive to encourage compliance in order to avoid disruptions in the supply chain. This document is part of a broad industry communication programme to ensure that all stakeholders are aware of the SOLAS amendments and take appropriate action to engage with counterparties in order to be prepared to comply on 1 July 2016.

The arrangement of the information in this document is as follows.

## a. Questions

The questions are grouped on the basis of whether they are 'General' (Section A), or relate to 'Method 1' (Section B) or to 'Method 2' (Section C). Everything contained here reflects actual questions that have been raised by industry representatives; these will not be comprehensive and stakeholders are invited to approach one of the sponsoring organisations (see end of document for details), who will consult in order to provide a joint industry response.

## b. Type of FAQs

Each question below is categorised into one of four categories:

- i. National (e.g. the approach of a given Competent Authority (CA) towards enforcement)
- ii. International (e.g. how to respond where the tare mass of a container is missing or shipper believes it to be inaccurate)
- iii. Commercial (e.g. cut-off times for provision of the verified gross mass to the carrier and the terminal operator)
- iv. Other (anything not included in another category).

## c. Answers

Where it is recognised as a 'National' issue, it will be for the relevant national Competent Authority to provide further information.

<sup>1</sup> The Safety of Life at Sea Convention, as amended

<sup>2</sup> MSC.1/Circ.1475

# SECTION A: GENERAL

## A1. Clearly responsibilities start with the shipper. But who is 'the shipper' in the context of this new procedure?

This is an **International** issue. There are also Commercial implications.

Under the SOLAS requirements, the shipper named on the ocean bill of lading is the party responsible for providing the maritime (ocean) carrier ('master') and the terminal operator ('terminal representative') with the verified gross mass of a packed container. The carrier and the terminal operator must not load a packed container aboard a ship unless they have the verified gross mass for that container.

MSC 1 / Circ. 1475<sup>3</sup> defines 'the shipper' as "a legal entity or person named on the bill of lading or sea waybill or equivalent multimodal transport document as shipper, and/or who (or in whose name or on whose behalf) a contract of carriage has been concluded with a shipping company."

Due to the complexity of the international supply chain, the entity identified as the 'shipper' on the bill of lading may not have direct or physical control over key elements of the process by which verified gross mass is determined. A 'shipper' in such circumstances should be aware of their responsibilities and ensure that arrangements are in place to obtain and provide a verified gross mass in compliance with these international and national regulations.

It should be noted that the SOLAS requirements are distinct from INCOTERMS, which govern the *sale* of the goods, not the *transport* of the goods. The parties to the sales contract/contract of sale under INCOTERMS need to determine how verified gross mass will be obtained, i.e. whether by Method 1 or Method 2 (as permitted by the CA of the State in which the packing of the container is completed) and how this information can be provided to the carrier by the shipper as identified in the bill of lading.

If in doubt about which entity is 'the shipper', contact one of the organisations identified at the end of this document.

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## A2. Is there an agreed format to communicate verified gross mass?

As an **International** issue, SOLAS does not mandate any particular form of communication between the parties exchanging the verified gross mass information.

Subject to any additional national requirements, the information to be provided by the shipper is the same under Method 1 and Method 2, being the verified gross mass of the packed container, conspicuously identified as such, signed by the shipper or a person duly authorised by the shipper.

The information and signature may be transmitted electronically, and the signature may consist of the last name of the responsible person in capital letters.

Several existing EDI messages have been amended by SMDG (Ship-planning Message Design Group) and a new EDI message 'VERMAS' specifically in relation to verified gross mass has been developed. Further information is available from SMDG ([www.smdg.org](http://www.smdg.org)).

In parallel to the SMDG efforts, the US organization responsible for the ANSI X12 messages has announced that a new code is available to capture verified container weight information. The new code will be published with the next release of the ANSI X12 standard, but trading partners may agree to use the code in earlier versions of the standard (for example, version 4010).

As a **Commercial** issue, the form of exchange and precise substance should be agreed between the commercial parties.

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## A3. Is there a deadline for when the information must be received by the carrier and the terminal operator?

This is a **Commercial** issue.

Verified gross mass is required in order to prepare the stowage plan of the ship prior to loading. Deadlines will differ according to a number of factors; shippers should obtain information on documentary cut-off times from their carriers in advance of shipment. It is recognised that 'just in time' shipments will need specific coordination between the shipper and carrier to ensure that the objectives of SOLAS are met and the verified gross mass for such shipments is communicated and used in the ship stowage plan.

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## A4. If the shipper communicates the verified gross mass as required by this regulation, is there then an obligation under either Method 1 or Method 2 on the carrier (or terminal operator) to check the value given for that gross mass and report to the authorities any discrepancy that may be found?

As an **International** issue, the requirements are for the carrier and the terminal to ensure that the verified gross mass has as a condition for ship loading been communicated sufficiently in time to be used in the ship stow planning process. There is no legal obligation to check the value so communicated. There is no requirement for the verified gross mass to be notified to governmental authorities.

As a **Commercial** issue, the objective of the SOLAS amendments is to ensure that the carrier and terminal operator have available as a condition for ship loading an accurate gross mass of each packed container. Shippers should develop effective procedures in conformance with the SOLAS requirements to obtain such information with that objective in mind. There is no requirement that the carrier or terminal operator weigh a packed container for which the shipper has already provided the verified gross mass.

<sup>3</sup> Ibid. Annex paragraph 2.1.12

If, however, the packed container is weighed, for whatever reason, and the gross mass is different from that provided by the shipper by an amount deemed to be material, then the carrier and terminal operator will need to have a process for determining which value to use.

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**A5. If goods are put onto a feeder ship from, for example, Grangemouth (UK) that proceeds to Rotterdam (Netherlands), will verified gross mass have to be established in Grangemouth or Rotterdam or both places?**

This is an **International** issue.

Verified gross mass is required before loading the packed container on board a ship covered by the SOLAS requirements at its initial port of loading, unless driven onto a ro-ro ship on a chassis or trailer. Thus, in this question, the verified gross mass must be determined prior to loading aboard ship at Grangemouth.

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**A6. The requirement is for accurate gross mass; is there a margin of error defined for this 'accuracy'?**

As an **International** issue, the SOLAS regulations provide that verified gross mass shall be obtained under both Method 1 and 2 by using weighing equipment that meets the applicable accuracy standards and requirements in the State in which the equipment is being used. Those national standards and requirements will determine the acceptable level of accuracy of the weighing equipment used. There is no provision in SOLAS for any margin of error; this is a physical weighing requirement, not a system of estimation. Gross mass derived using compliant equipment and procedures will meet the legal requirements.

There is no single international weighing equipment accuracy standard at present although the International Organization of Legal Metrology has issued recommendations for various types of weighing equipment. For example, EU Directive 2004/22/EC on measuring instruments provides guidance within the European Union in relation to 'automatic weighing instruments'. Similar guidance exists for 'non-automatic weighing instruments' and many countries and regions will have enacted legislation and standards to cover such equipment.

Accuracy refers to the precision with which a measurement (in this case mass) is made. Accuracy is the only concept with which the shipper need be concerned. National enforcement agents may exercise discretion or tolerance in deciding when to initiate further investigations or penalty action. However, shippers using compliant weighing devices and processes will obtain values that are well within any tolerances adopted nationally for enforcement purposes. Shippers not using compliant weighing devices and processes may be found in violation even if the gross

masses that they provide fall within government enforcement tolerances.

If a shipper is merely estimating the gross mass and hoping to fall within government enforcement tolerances, it is violating the SOLAS requirements and could incur sanctions or delays pursuant to applicable national legislation. There are no exemptions from the requirement to weigh using either Method 1 or Method 2.

See also Questions A7, A8, A9 and A10.

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**A7. Given that there is no single international approval for weighing equipment, does this mean that different standards will be applied around the world, making it uncertain whether equipment can be approved internationally or whether values given will be accepted globally?**

This is a **National** issue.

Within the scope of SOLAS, this is a matter for determination by signatory States. It is the case, however, that all equipment used (whether for Method 1 or Method 2) will need to meet the applicable accuracy standards and requirements of the State in which the equipment is being used.

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**A8. How accurate does the verified gross mass need to be considering environmental factors of influence such as humidity on wood (pallets), carton (if used as primary packaging), etc.?**

This is an **International** issue.

Any verified gross mass obtained under both Method 1 and 2 shall be obtained using weighing equipment that meets the applicable accuracy standards and requirements of the State in which the equipment is used.

Some cargo products may incur normal, minor changes in mass from the time of packing and weighing until delivery (e.g. due to evaporation or humidity changes) and some containers' tare mass may change over time and vary somewhat from the tare mass marked on the container. However, these margins of error should not normally present safety concerns.

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**A9. Will governments apply an enforcement tolerance threshold for determining compliance with the SOLAS requirements?**

This is a **National** issue.

However, a government's enforcement threshold should not be confused with the issue of how accurate the verified gross mass obtained by the shipper should be. The shipper is obligated to use weighing equipment that complies with the accuracy standards of the jurisdiction in which the

equipment is used. Use of such equipment should produce a verified gross mass that is well within government enforcement tolerances. Enforcement tolerances are simply a means by which a government decides how best to allocate its enforcement resources; as such, they have no effect on how the shipper goes about determining the verified gross mass.

The SOLAS Method 1 and Method 2 regulations (and any additional national regulations) control the procedures by which the gross mass is to be determined.

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**A10. How will this be enforced and what will be the level of penalties imposed by an Administration if a container is delivered by a shipper to a carrier with a mis-declared gross mass or if a shipper does not provide the verified gross mass for a packed container?**

As a **National** issue, fines and other penalties will be imposed under national legislation. Enforcement agencies may implement measures to satisfy themselves that compliance is achieved, which might be expected to include documentation checks, auditing or random weighing.

As a **Commercial** issue, the penalties may involve repacking costs, administration fees for amending documents, demurrage charges, delayed or cancelled shipments etc. It should be noted that SOLAS imposes an obligation on the carrier and the terminal operator not to load a packed container aboard ship for which no verified gross mass has been provided or obtained. Compliance with this obligation by the carrier and terminal operator may result in commercial and operational penalties, such as delayed shipment and additional costs if the shipper has not provided the verified gross mass for the packed container.

(Note: The new SOLAS requirements apply equally to both under and overweight containers.)

**A11. The SOLAS requirement derives from safety aspects. Cargo mass information may also be required for Customs purposes. If the verified gross mass declared for SOLAS purposes subsequently is amended, for example after actual weighing of the packed container, does Customs need to be informed?**

This is a **National** issue.

SOLAS does not regulate Customs matters. Provision of the gross and net mass of goods in declarations to Customs is regulated according to national Customs legislation. The mass required under SOLAS versus Customs requirements may be different; e.g, Customs may require cargo mass, while SOLAS requires the total, verified gross mass of the packed container.

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**A12. Should a 'pilot' scheme be set up by a carrier, shippers, port and competent authority to test the system?**

This is a **National** and/or **Commercial** issue.

It is recognised that there may be valuable lessons from such an effort, but it is a matter to be discussed among the affected parties.

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**A13. Simply knowing the verified gross mass is not sufficient to achieve safety through the supply chain, since many incidents on the road and rail are caused by improper load distribution and inadequate securing. What can be done about that?**

This is an **International** issue.

It is correct that improper load distribution and inadequate securing in packed containers may result in incidents even where the gross mass has been correctly obtained and declared. The IMO, ILO and UNECE collaborated to produce the 'Code of Practice for Packing Cargo Transport Units' (CTU Code) to address such concerns. This non-mandatory international code provides recommended and actionable guidance for the proper packing, securing and handling of cargo into or onto CTUs. The Code, which applies to surface transport operations throughout the intermodal supply chain, is available to download in various languages through the searchable website at: [www.unece.org/trans/wp24/guidelinespackingctus/intro.html](http://www.unece.org/trans/wp24/guidelinespackingctus/intro.html)

## SECTION B: METHOD 1

### B1. Where can we find a list of publically available weighbridges?

This is a **National** issue.

It should be noted that procedures need to be in place to obtain the verified gross mass of each packed container, taking accurate account of any other mass, such as truck, trailer, fuel or equipment etc. Additionally, note that where applicable the International Vehicle Weight Certificates (IVWC) shows the total gross weight of the un-laden vehicle, not the gross mass of the packed container.

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### B2. Some weighbridges don't produce tickets. Would a gross mass being written on driver's consignment note, signed and stamped by the load point be acceptable?

As a **International** issue, there is no requirement under SOLAS that a 'weight ticket' or similar must be provided. What SOLAS requires is that the shipper communicates the verified gross mass in a 'shipping document' that can be part of the shipping instructions or be a separate communication. In either case, the document should clearly highlight that the gross mass provided is the 'verified gross mass', and the document must be signed by a person duly authorised by the shipper (the signature may be an electronic signature or may be replaced by the name in capitals of the person authorised to sign it).

As a **National** issue, national governments may, as part of their enforcement policies, require that shippers using Method 1 are in a position, upon request, to produce weight tickets or other documentation as deemed acceptable pursuant to national rules and regulations.

As a **Commercial** issue, it should be recognised that the shipper remains responsible to obtain and communicate the verified gross mass. There are inevitable process challenges to ensure effective coordination between the shipper and haulier to achieve effective documentary hand-off (whether electronic or paper) to avoid in-gate delays. Such processes should be discussed between the commercial parties, including the maritime carrier and the terminal operator.

### B3. Where a third party (including potentially a port terminal) starts weighing freight containers (i.e. under Method 1) will it have to become a 'verified weigher' in order to issue a valid weight ticket?

As an **International** issue, there is no such concept as a 'verified weigher' and the only obligation under SOLAS for a party weighing a packed container is to use calibrated and certified equipment that meets the accuracy standards and requirements of the state in which the equipment is being used. SOLAS does not make any additional requirements of the party weighing a packed container.

As a **National** issue, National governments may, as part of their enforcement policies, implement requirements applicable to owners of weighing equipment. It should be noted that SOLAS itself does not require any assessment or registration of a service provider and any such requirements would be determined by national authorities. See also Question B2.

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### B4. Port container handling equipment generally has on-board weighing technology ('PLCs') typically accurate to within 5% and designed to prevent overloading of the equipment. If such data are integrated into other relevant systems (including those used for ship stowage planning) is this likely to be acceptable for determining verified gross mass under Method 1?

As an **International** issue, SOLAS only requires that the weighing equipment used to obtain the verified gross mass meets the applicable accuracy standards and requirements of the State in which the equipment is being used.

As a **National** issue, although accuracy of weighing equipment is a matter for national regulation, it is unlikely that a weighing device with a known margin of error of 5% would meet applicable accuracy standards.

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### B5. Who will pay for carrying out the weighing process for Method 1?

This is a **Commercial** issue and will be a matter to be determined by the parties involved. Since the shipper is legally responsible to obtain and provide the verified gross mass, it may be expected that any third party service provider would seek re-imbursement of the cost of weighing.

## SECTION C: METHOD 2

### C1. Our company only ever provides part loads/less than container load (LCL), never a full container load (FCL) so what is our position?

This is a **Commercial** issue

This will depend on your contractual arrangement with the co-loading freight forwarder that enters into the contract of carriage with the carrier and thus becomes the shipper to the carrier (see A1 above). If permitted under the terms of the contract with the 'master' forwarder, your company may use Method 2 to verify the actual mass of the goods being shipped and pass that information on to the party completing the packing of the container. However, responsibility for providing the accurate, verified gross mass of a co-loaded container remains with the shipper named on the maritime carrier's bill of lading, i.e. the 'master' freight forwarder.

### C2. Can I deliver freight to my freight forwarder without knowing the mass and ask them to weigh it and establish the verified gross mass of the cargo and issue the appropriate documents?

This is a **Commercial** issue.

See the response to questions in C1 above. The 'shipper' under the contract of carriage remains responsible for accurately establishing verified gross mass of a packed container.

If your freight forwarder is the shipper on the maritime carrier's bill of lading, it may weigh the cargo, using Method 1 or 2, and provide the carrier with the verified gross mass of the container. If you are the shipper on the bill of lading, you are responsible for providing the carrier with the verified gross mass. Where the verified gross mass is obtained by a third party, such as a freight forwarder, the shipper will remain responsible that the verified gross mass provided to the carrier is correct. Parties in the maritime containerised supply chain are encouraged to ensure that their contractual arrangements take account of the SOLAS requirements.

### C3. Is it permissible for a company to provide a service to weigh cargo under Method 2 and issue a 'Verified Gross Mass' certificate to a shipper? If so what criteria will they have to meet?

This is an **International** and **National** issue:

As an **International** issue, nothing in SOLAS would prevent a company from offering such a service as long as the company uses weighing equipment that meets the applicable accuracy standards and requirements of the State in which the equipment is used. However, a shipper using the mass obtained from a company providing such

weighing services remains under SOLAS responsible to ensure that the verified gross mass provided to the carrier and the terminal operator is accurate.

As a **National** issue, provision of services to weigh cargo using Method 2 may be subject to national rules and regulations.

### C4. If Method 2 is chosen and intercompany transactions take place (e.g. the producing / dispatching entity is based in UK while bill of lading is drawn up for export at a consolidation port such as Antwerp (Belgium) and a different legal entity within a group of companies is the exporter of record) which legal entity should comply with any national rules and regulations regarding Method 2, the exporter of record or local UK entity actually packing the container and physically able to determine the relevant mass information?

This is an **International** issue.

The entity that would need to comply with any national rules and regulations regarding Method 2 is the one in the State in which the packing and sealing of the container is completed<sup>4</sup>.

### C5. For FCL shipments involving a freight forwarder there are two different scenarios:

- a. where the forwarder is the agent (putting the carrier and shipper in a direct contractual arrangement); and
- b. where the freight forwarder acts as principal and issues a house bill of lading, being named as the 'shipper' on the maritime carrier's bill of lading/contract of carriage.

**In either scenario, can the freight forwarder rely on the mass provided by the forwarder's customer using Method 2?**

This is an **International** and a **National** issue.

**Internationally**, for the purpose of the SOLAS requirements, the 'shipper' is the entity named on the maritime carrier's bill of lading/contract of carriage. It is the shipper who is responsible for obtaining the verified gross mass of the packed container and for providing it to the maritime carrier and terminal operator; the preparation of any documentation needs to be determined between the commercial parties involved.

The SOLAS requirements do not include registration or approval in order to use Method 2, but this may be part of national implementation measures to achieve compliance. It must be stressed that the absence of specific national rules for registration and approval for use of Method 2 does not mean that shippers may not use Method 2 to determine the

<sup>4</sup> Ibid. paragraphs 5.1.2.3 and 5.1.2.3.1



verified gross mass and provide it to the carrier and the terminal operator. However, mass should be obtained using calibrated and certified weighing equipment that complies with the accuracy standards of the jurisdiction in which the equipment is used.

As a **National** issue:

**In jurisdictions that do not implement Method 2 registration and certification requirements**, where a freight forwarder enters into contracts of carriage with maritime carriers (i.e. acts as a *principala*), it is the freight forwarder who is named as the shipper on the maritime carrier's bill of lading and as such is legally responsible under SOLAS for obtaining and providing the verified gross mass. If such a freight forwarder, named as shipper on the bill of lading, seeks to rely on another party (such as a customer) to provide that verified gross mass information, it is the forwarder's responsibility to be satisfied that the other party accurately determines the verified gross mass that is then provided to the carrier. If the forwarder is acting as an agent, it will not be named as shipper on the bill of lading. Consequently, it will not be responsible for obtaining and providing the verified gross mass; the shipper named on the bill of lading will.

**In jurisdictions that do implement Method 2 registration and approval requirements**, the basic SOLAS requirements still apply, i.e. if the forwarder is named as the shipper on the bill of lading, that forwarder is legally responsible for obtaining and providing the verified gross mass. Whether such a forwarder would be able to rely on the verified gross mass obtained by another party may depend on the specific national rules pertaining to Method 2. If the forwarder is acting as an agent, it will not be named as shipper on the bill of lading. Consequently, it will not be responsible for obtaining and providing the verified gross mass; the shipper named on the bill of lading will.

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**C6. What if the tare mass appearing on containers is lacking or inaccurate due to wear and tear, etc.? What remedy is available?**

This is an **International** issue.

The tare mass of every container is marked on the exterior of the container at the time of manufacture. Shippers should solely rely on the tare mass value marked on the container. Where it is missing, or believed or established to be inaccurate, the container operator should be contacted to take appropriate remedial action.

**C7. We conclude that the four elements to be determined in order to declare the verified gross mass of a packed container under Method 2 are:**

- a. the tare container mass,**
- b. the mass of the product without any packaging,**
- c. the mass of primary packaging (if any), and**
- d. the mass of all other packaging, pallets, dunnage, space fillers and securing material**

**Is this correct?**

This is an **International** issue.

Reference is made to MSC.1/Circ.1475. In general, this correctly states the process for determining the verified gross mass of a packed container using Method 2, but it should be noted that there may be several layers or levels of packaging depending partly of the value and the level of protection that the product requires.

It should also be noted regarding points b-d that it is only possible to rely on mass information provided by a supplier if such mass information is clearly and permanently marked on the surfaces of individual, original sealed packages and cargo items<sup>5</sup>.

In all other cases, the mass referred to in points b-d must be determined by weighing, using weighing equipment that meets the applicable accuracy standards and requirements in the State in which the equipment is being used.

The tare mass of the container is indicated on the door end of the container and does not need to be determined by weighing.

Furthermore, Method 2 may be inappropriate and impractical for certain types of cargo items, e.g., scrap metal, unbagged grain and other cargo in bulk, that do not easily lend themselves to individual weighing of the items to be packed in the container<sup>6</sup>.

Method 2 is also inappropriate for liquid and gaseous cargoes, whether carried in ISO tank containers or 'flexitanks'. Volumetric flow systems may be acceptable for other purposes but gross mass may not be accurately determined due to other variables.

<sup>5</sup> Ibid. paragraph 5.1.2.1

<sup>6</sup> Ibid. paragraph 5.1.2.2

## SPONSORS

The following organisations have produced this Frequently Asked Questions document, expanding from the initial correspondence group work undertaken by the UK Maritime & Coastguard Agency. It is recognised that further general questions are likely to be raised, only some of which will be resolved with the relevant National Competent Authority or commercial counter-party. You are invited to raise such further questions with one of the organisations below.



### TT Club

TT Club is the international transport and logistics industry's leading provider of insurance and related risk management services. Established in 1968, the Club's membership comprises ship operators, ports and terminals, road, rail and airfreight operators, logistics companies and container lessors. TT Club has regularly highlighted issues arising through the supply chain relating to inaccurate gross mass information, and incorrect or inadequate packing of CTUs. As a result, TT Club has participated throughout the IMO process leading to the amendment of SOLAS and the related implementation guidelines.

[www.ttclub.com](http://www.ttclub.com)



### World Shipping Council

The World Shipping Council (WSC), with offices in Washington and Brussels, represents the global liner industry on regulatory, environmental, safety and security policy issues. WSC members operate approximately 90 percent of the global liner capacity, providing approximately 400 regularly scheduled services linking the continents of the world. Collectively, these services transport about 60 percent of the value of global seaborne trade, and more than US\$ 4 trillion worth of goods annually. The WSC has observer status with the IMO, and was actively involved in the development of the SOLAS container gross mass verification requirements.

[www.worldshipping.org](http://www.worldshipping.org)



### ICHCA International Limited

The International Cargo Handling Coordination Association (ICHCA), founded in 1952, is an independent, not-for-profit organisation dedicated to improving the safety, security, sustainability, productivity and efficiency of cargo handling and goods movement by all modes, and through all phases of national and international supply chains. ICHCA's privileged non-government organisation (NGO) status enables it to represent its members and the cargo handling industry at large, in front of national and international agencies and regulatory bodies. In this capacity, ICHCA actively participated in the debates leading to these SOLAS amendments.

[www.ichca.com](http://www.ichca.com)



### Global Shippers' Forum

The Global Shippers' Forum (GSF), with offices in London and Brussels, is the world's leading trade association for shippers engaged in international trade moving all goods by all modes of transport. The GSF represents shippers as users of international freight services on regulatory, operational and trade issues. Its main focus is to influence commercial developments in the global supply chain and the policy decisions of governments and international organisations as they affect shippers and receivers of freight. GSF was actively involved in the debates leading to these SOLAS amendments.

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