



GOVERNMENT OF PAKISTAN
MINISTRY OF PORTS & SHIPPING
DIRECTORATE GENERAL, PORTS & SHIPPING

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SHIPPING NOTICE NO. 001/2016

CARGO SAFETY - Guidance on the implementation of the SOLAS VI Regulation 2 amendment requiring the verification of the gross mass of packed containers

Notice to all Ship Owners, Ship Operators and Managers, Masters and Officers of Merchant Ships, Agents, Charterers, Cargo Packers, Cargo Consolidators, Freight Forwarders, Shippers, Consignors, Training Providers, Inspectors of Cargoes, Port Authorities, Terminal Operators and others involved in the transport of containers

Summary

This Shipping Notice outlines the legal position in the Pakistan regard to the recent amendments to SOLAS VI which take effect from 1st July 2016. It also signposts detailed guidance for Pakistan shippers, terminals/ports and carriers on implementing the SOLAS VI provisions.

Guidance on the amendment to Chapter VI of SOLAS

1. Following concerns raised by the shipping industry regarding the mis-declaration of the declared gross mass of packed containers, SOLAS Chapter VI Regulation 2 has been amended.
2. The amendment to SOLAS VI Regulation 2 which comes into force 1st July 2016 expands on how the gross mass of cargo (contents) carried in units including tare weight of the container, must be verified. This amendment gives shippers two possible options for deciding which method to use for obtaining such an accurate gross mass.
3. The document annexed to this Shipping Notice gives detailed advice on how Pakistan shippers, ports/terminals and carriers can meet their responsibilities under this SOLAS amendment.

Annex to Shipping Notice 1/2016

Government of Pakistan guidelines on Container gross mass (weight) verification

Summary

This document outlines the Pakistan guidelines for the implementation of the mandatory amendments to the International Convention for the Safety of Life at Sea (SOLAS) Chapter VI, Part A, Regulation 2 - Cargo information which were adopted in November 2014. The SOLAS amendment places a requirement on the shipper of packed containers to verify and provide the container's gross mass to the *carrier and terminal representative prior to it being loaded onto a ship.

Contents

1	Introduction	Page 3
2	Definitions	Page 3
3	Scope	Page 3
4	Main Principles	Page 4
5	Methods for obtaining the verified gross mass of a packed container	Page 4
6	Documentation	Page 5
7	Information flow within the supply chain – shipper-carrier interface	Page 5
8	Discrepancies in gross mass	Page 6
9	Containers exceeding their maximum gross mass	Page 6
10	Empty containers	Page 7
11	Contingencies for containers received without a verified gross mass	Page 7
12	Mis-declarations	Page 7
13	Enforcement	Page 7

List of Annexes

Annex 1	Definitions
Annex 2	Method 2 Application Process to DGP&S
Annex 3	Methods for obtaining the verified gross mass of a packed container
Annex 4	Bibliography and supplementary information

* 'Carrier' is used as a term to cover the 'master or his representative' as in SOLAS Chapter VI regulation 2

1 Introduction

1.1 As a result of incidents, published reports and concerns from carriers and others within the transport supply chain, the International Maritime Organization (IMO) has recognised and discussed the problems associated with freight containers, structural issues, packing, their packed gross mass (mis-declared cargo weights) and how they are secured on to the ship, for over seven years. Following the discussions at previous IMO sub-committees involving many governments and industry organisations, in November 2014 the IMO's Maritime Safety Committee meeting (MSC 94) adopted the changes to the Safety of Life at Sea (SOLAS) Convention Chapter VI Regulation 2 – Cargo information regarding a mandatory container gross mass verification together with associated guidelines published as MSC.1/Circ. 1475. It should be noted both the SOLAS text and the Guidelines were produced as a result of open discussions, based on proposals agreed between both governments and trade bodies to address the recognised and documented safety issues whilst minimising the impact on participants within the supply chain.

1.2 The effect on the supply chain is that the verification of the gross mass of containers will be required before packed containers are placed aboard ships, see paragraph 3 Scope. The supply chain is a complex and dynamic system consisting of a number of different companies that work in succession to produce, transport and deliver goods from the supplier to the customer. To ensure compliance with these SOLAS provisions, participants within the supply chain should agree amongst themselves the processes necessary to ensure that the weights are available prior to the packed container being loaded aboard the ship.

1.3 The SOLAS provisions were adopted in November 2014 and will enter into force on 1st July 2016, the intervening period should be considered to be the transition period.

1.4 These Guidelines have been drafted following discussions between the relevant Pakistan trade bodies and the DGP&S and Government advice on implementing the provisions of SOLAS. The Guidelines also identify elements of a non regulatory nature which those with differing commercial roles and activities within the transport supply chain may need to consider.

2 Definitions

It is important to ensure consistency by using the definitions set out in MSC 1/Circ.1475 and which are reproduced in Annex 1.

3 Scope

3.1 Unless specified in paragraph 3.2, the SOLAS requirements to verify the gross mass of a packed container apply to all containers to which the Convention for Safe Containers, 1972, as amended (CSC) applies, and which are to be stowed onto any ship. These guidelines apply in relation to export consignments from the Pakistan; the gross mass of inbound containers will have either been verified in the country of loading or through prior agreement between shipper and carrier.

3.2 The provisions of SOLAS Chapter VI, Part A, Regulation 2 do not apply to:

(i) A packed container on a chassis or trailer to be driven on a ro-ro ship which is engaged on short international voyages.

(ii) Cargo items tendered by a shipper to the master for packing into a container already on board the ship.

(iii) "Offshore containers" to which the CSC, according to the *Guidelines for the approval of offshore containers handled in open seas* (MSC/Circ.860) and the *Revised recommendations on harmonized interpretation and implementation of the International Convention for Safe Containers, 1972, as amended* (CSC.1/Circ.138/Rev.1), does not apply.

3.3 Where the application of a trade provision is specified in a contract of sale and there is any conflict between the trade provision and SOLAS, SOLAS takes precedence.

4 Main principles

4.1 The responsibility for obtaining and documenting the verified gross mass of a packed container lies with the shipper.

4.2 A container packed with packages and cargo items should not be loaded onto a ship to which the SOLAS regulations apply unless the master or his representative and the terminal representative have been provided with, in advance of vessel loading, the verified actual gross mass of the container.

4.3 The purpose of this SOLAS regulation is to obtain an accurate gross mass of packed containers that are moved through the supply chain prior to loading aboard the ship.

5 Methods for obtaining the verified gross mass of a packed container

5.1 The SOLAS regulations prescribe two methods by which the shipper may obtain the verified gross mass of a packed container which will be referred to as "Method 1" and "Method 2" in this document.

5.1.1 Method 1:

Weighing the packed container using calibrated and certified weighing equipment (e.g. weighbridges, load cell sensing technologies etc) (see Annex 3).

5.1.2 Method 2:

Weighing all packages and cargo items, including the mass of pallets, dunnage and other securing material to be packed in the container and adding the tare mass of the container to the sum of the single masses, using a certified method approved by the Pakistan competent authority, that is the Directorate General Ports & Shipping or its authorised body.

5.2 It should be noted that for certain types of cargo items (e.g. scrap metal, unbagged grain and other cargo in bulk) it would be inappropriate and impractical to use Method 2 (see 5.5 below).

5.3 Notwithstanding, the requirements of the "IMO/ILO/UNECE code of practice for packing of cargo transport unit (CTU Code)" in relation to load distribution should also be followed.

*SOLAS regulation III/2 defines "short international voyage" as an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety, and which does not exceed 600 miles in length between the last port of call in the country in which the voyage begins and the final port of destination.

5.4 Approval process for shippers wishing to use Method 2

5.4.1 In order to use "Method 2" SOLAS requires that the Administration of Country, DGP&S in case Pakistan, has to approve the certified method used by that shipper. Recognising that shippers use differing methods of work and management systems the routes to obtaining approval are:-

1. Businesses holding an accredited Quality Management System (such as ISO 9001 or ISO 28000), which include documented procedures to satisfy the weighing requirement, will be deemed to have demonstrated their competence to use Method 2. The shipper will be required to submit the relevant procedures along with a copy of the any certificates to the DGP&S.
2. Companies not accredited to the above but operating a company management system can be approved by the DGP&S, after checking electronic or documentary submissions.
3. Other auditing schemes as approved by the Federal Government of Pakistan.

5.4.2 The actual accreditation process is detailed in Annex 2: and guideline weighing processes are contained within Annex 3.

5.4.3 Companies which successfully become authorised to use Method 2 will be registered to view data on-line, overseen by the DGP&S. The database will be accessible to approved shippers and to both carriers (shipping lines) and port/terminal operators in order that, if they wish to or suspect a discrepancy exists, it may be confirmed, that particular containers are being presented by companies certified under Method 2, as required,.

5.5 It should be noted that certain types of cargo items (e.g. scrap metal, unbagged grain, and other cargo in bulk) do not easily lend themselves to individual weighing of the items to be packed in the container. In such cases, the usage of Method 2 would be inappropriate and impractical, and Method 1 should be used instead.

6 Documentation

6.1 The SOLAS regulations require the shipper to verify the gross mass of the packed container using Method 1 or Method 2 and to communicate the verified gross mass in a shipping document. This document can be part of the shipping instructions to the shipping company or a separate communication (e.g. a declaration including a weight certificate produced by a weigh station utilising calibrated and certified equipment on the route between the shipper's origin and the port terminal or in the case of Method 2 the shipper's approval number must be included). In either case, the document should clearly highlight that the gross mass provided is the "verified gross mass".

6.2 Irrespective of its form, the document declaring the verified gross mass of the packed container should 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.

³ In the context of Method 2 issues, any reference to DGP&S is taken to mean DGP&S or its authorised bod

7. Information flow within the supply chain – shipper-carrier interface

7.1 The SOLAS text is clear in assigning shippers' and carriers' responsibilities and the role of the terminal. The shipper or their agent is responsible for providing a "verified gross mass" to the carrier or their terminal representative, regardless of who actually packs the container. Much complexity exists in the modern supply chain and the process of information flow within the supply chain could be considered to be elements of a non-regulatory nature and they have been included to highlight issues which companies may need to consider. These elements are given in paragraphs 8, 9, 10 and 11.

7.2 In order to ensure the smooth flow of cargo, it is essential that information is provided to other parties as early as possible. How this is achieved will be for the relevant parties in the supply chain involved in moving goods to determine. SOLAS requires that the information is submitted sufficiently in advance to be used in the preparation of the ship stowage plan. It is essential that the verified gross mass is obtained before the container is physically loaded on to a ship.

7.3 As detailed in MSC.1/Circ.1475 paragraph 5.1.2 and 5.1.3, where cargo submitted and correctly marked is tendered by one approved verified weigher to another approved verified weigher for final loading, it will not need to be re-weighed prior to packing into the container although responsibility for providing the accurate verified gross mass remains with the shipper named on the bill of lading. For the purpose of these Guidelines, the arrangement whereby a approved verified weigher does not need to re-weigh cargo submitted for final loading by another approved verified weigher is referred to as the 'handshake' principle.

8 Discrepancies in gross mass

8.1 Any discrepancy between a packed container's gross mass declared prior to verification and its verified gross mass should be resolved by use of the verified gross mass.

8.2 If a packed container is weighed at the port terminal facility, that is the gross mass that should be used for ship stow planning.

8.3 In circumstances where a packed container is not weighed at the port terminal facility but the port terminal facility nevertheless identifies that a discrepancy exists regarding the verified gross mass as declared or provided to it, the port terminal facility and the carrier should agree on the steps to be taken to confirm the verified gross mass of the packed container.

8.4 Paragraphs 8.1, 8.2 and 8.3 highlight that the importance of communication between the parties is key and it has to become routine. Carriers should provide cut-off times for ship stowage planning to assist the shipper in ensuring that the verification of the container gross mass and transport to the terminal/port is carried out within the required time frame to avoid the consequences of discrepancies in gross mass, such as not being loaded onto the ship or the ship having to carry out a re-stow. How the information is documented and passed down the line is subject to commercial agreements between the parties and is not a regulatory issue.

9 Containers exceeding their maximum gross mass

9.1 SOLAS regulation VI/5 requires that a container is not packed to more than the maximum gross mass indicated on the Safety Approval Plate under the International Convention for Safe Containers (CSC), as amended. A container with a gross mass exceeding its maximum permitted gross mass shall not be loaded onto a ship.

9.2 All parties are encouraged to consider how such non-compliances are identified and rectified.

10 Empty containers

10.1 Shippers and operators of empty containers are encouraged to have practices and arrangements in place to ensure that they are empty. The tare weight will visually appear on the container in accordance with the International Organization for Standardization (ISO) standard for container marking and identification and it should be used in such cases.

11 Contingencies for containers received without a verified gross mass

11.1 Under SOLAS no container without a verified gross mass may be loaded onto a ship. It is for individual carriers and port operators to devise operational procedures to ensure that this regulatory requirement is complied with on all occasions.

11.2 Carriers and Terminal operators should have sufficient documented procedures to demonstrate the manner in which they will be able to achieve this requirement.

12 Mis-declarations

12.1 Any incidence of a mis-declaration of the gross mass of a container should be corrected by the shipper as soon as practicable. Records of mis-declarations and corrections made should be available on request by the DGP&S. Failure to record and correct such incidents may result in the withdrawal of a company's "Method 2" approval by the DGP&S.

Note: The DGP&S does not intervene in commercial matters which may arise from non regulatory issues highlighted in paragraph 7.

13 Enforcement

13.1 It is anticipated that Regulators will use an enforcement threshold +/-5% of the verified gross mass of the container. However, this will be used on a case by case basis.

13.2 Businesses taking advantage of the facilitation offered by Method 2 will be required to ensure that the expected levels of compliance are met, proper records kept and that these are made available on request by the DGP&S.

13.3 Should a business fail to meet the expected standard of an accredited company, the DGP&S may suspend or revoke the verification agreement thereby prohibiting the company from taking advantage of the Method 2 weighing process until any identified deficiencies have been rectified. Should this occur, further guidance on the requirements to be met by businesses seeking to use Method 2 should be obtained from the DGP&S.

13.4 The penalties take two forms and these are explained below.

1. Commercial - Repacking costs, administration fees for amending documents, demurrage charges etc.
2. Regulatory - imposed by the DGP&S based upon statute which in this case are the Merchant Shipping Ordinance 2001.

13.5 In the event of an incident or an issue with a container stow as part of Port State Control or an investigation by the Regulator, the carrier and/or their terminal representative should be able to demonstrate that they have systems in place to ensure prior to the loading

of packed containers that they have the verified gross mass for each container and that any changes in the container gross mass notified between pre-booking and loading aboard a ship are managed.

Annex 1- Definitions

For the purpose of these Guidelines:

1 *Administration* means the Government of the State whose flag the ship is entitled to fly.

2 *Calibrated and certified equipment* means a scale, weighbridge, lifting equipment or any other device, capable of determining the actual gross mass of a packed container or of packages and cargo items, pallets, dunnage and other packing and securing material, that meets the accuracy standards and requirements of the State in which the equipment is being used.

3 *Cargo items* has the same general meaning as the term "cargo" in the International Convention for Safe Containers, 1972, as amended (hereinafter referred to as "the CSC"), and means any goods, wares, merchandise, liquids, gases, solids and articles of every kind whatsoever carried in containers pursuant to a contract of carriage. However, ship's equipment and ship's supplies, including ship's spare parts and stores, carried in containers are not regarded as cargo.

4 *Carrier* The party who, in a contract of carriage, undertakes to perform or to procure the performance of carriage by sea.

5 *Container* has the same meaning as the term "container" in the CSC and means an article of transport equipment:

- (a) of a permanent character and accordingly strong enough to be suitable for repeated use;
- (b) specially designed to facilitate the transport of goods, by one or more modes of transport, without intermediate reloading;
- (c) designed to be secured and/or readily handled, having corner fittings for these purposes; and
- (d) of a size such that the area enclosed by the four outer bottom corners is either:
 - (i) at least 14 m² (150 sq. ft.); or
 - (ii) at least 7 m² (75 sq. ft.) if it is fitted with top corner fittings.

6 *Contract of carriage* means a contract in which a shipping company, against the payment of freight, undertakes to carry goods from one place to another. The contract may take the form of, or be evidenced by a document such as a sea waybill, a bill of lading, or multi-modal transport document.

7 *Gross mass* means the combined mass of a container's tare mass and the masses of all packages and cargo items, including pallets, dunnage and other packing material and securing materials packed into the container (see also "*Verified gross mass*").

8 *Package* means one or more cargo items that are tied together, packed, wrapped, boxed or parcelled for transportation. Examples of packages include, but are not limited to, parcels, boxes, packets and cartons.

9 *Packed container* means a container, as previously defined, loaded ("stuffed" or "filled") with liquids, gases, solids, packages and cargo items, including pallets, dunnage, and other packing material and securing materials.

10 *Packing material* means any material used or for use with packages and cargo items to prevent damage, including, but not limited to, crates, packing blocks, drums, cases, boxes, barrels, and skids. Excluded from the definition is any material within individual sealed packages to protect the cargo item(s) inside the package.

11 *Securing material* means all dunnage, lashing and other equipment used to block, brace, and secure packed cargo items in a container.

12 *Ship* means any vessel to which SOLAS chapter VI applies. Excluded from this definition are roll-on/roll-off (ro-ro) ships engaged on short international voyages² where the containers are carried on a chassis or trailer and are loaded and unloaded by being driven on and off such a ship.

13 *Shipper* means a legal entity or person named on the bill of lading or sea waybill or equivalent multimodal transport document (e.g. "through" bill of lading) as shipper and/or who (or in whose name or on whose behalf) a contract of carriage has been concluded with a shipping company. The shipper may also be known as the sender.

14 *Shipping document* means a document used by the shipper to communicate the verified gross mass of the packed container. This document can be part of the shipping instructions to the shipping company or a separate communication (e.g. a declaration including a weight certificate produced by a weigh station).

15 *Tare mass* means the mass of an empty container that does not contain any packages, cargo items, pallets, dunnage, or any other packing material or securing material.

16 *Terminal representative* means a person acting on behalf of a legal entity or person engaged in the business of providing wharfage, dock, stowage, warehouse, or other cargo handling services in connection with a ship.

17 *Verified gross mass* means the total gross mass of a packed container as obtained by one of the methods described in paragraph 5.1 of these Guidelines. (see also "*gross mass*").

Annex 2 - Method 2 - Application Process to DGP&S

1 The DGP&S is responsible for approving, through the process described below, the suitability of businesses seeking accreditation and ensuring that the process fully conforms to the requirements of SOLAS as amended.

2 The process must provide / ensure a satisfactory level of security for all cargo to be packed in containers

Application procedure

3 Applicants need to submit the following as part of their application:

- Full Company name and head office address
- Addresses where verified weighing will be undertaken
- Name(s) of responsible person(s) Operations Director / Logistics Personnel etc
- Specifying / describing the weighing method to be used
- Detailing what weighing equipment is to be used as part of the documented procedure
- Equipment maintenance procedures
- Calibration procedures (including whether there are periodic internal checks)
- Discrepancy procedure
- Reporting and quarantining of faulty equipment
- Record retention
- Training
- Copy of certificates where processes are already audited as part of a Quality Management System

The process

5 For those companies without audited and certified procedures, if the preliminary details supplied by the applicant are considered satisfactory, the appropriate authority conducts (or arranges that an approved third party conducts) an on-site verification of the implementation, effectiveness and auditability of the weighing measures in place.

6 Following a successful verification visit the trader is considered to be an approved shipper for a period of time not exceeding 3 years and its name added to the official verification of container gross mass database administered by the DGP&S. The DGP&S (or the appointed Government department) continues its oversight of the process in order to ensure that it is updated as required and that all approved shippers maintain the level of implementation of their roles and safety responsibilities throughout the period of validity of their approval. To do so, the DGP&S may require the provision of information or documents and to conduct on-site inspections/spot-checks.

7 For those companies with a documented and externally audited system the DGP&S will check the documents to ensure their compliance with the requirements of the regulations. On a risk basis the DGP&S will determine whether or not they believe that the procedures comply with regulatory requirements. If they meet the requirements the relevant approval will be issued. The DGP&S will investigate any discrepancies including conducting an audit if required.

8 The DGP&S will issue an authorisation number to the verified shipper which will be in record of a DGP&S.

9 Details will be recorded on a central database administered by the DGP&S and access

details provided to authorised parties

Revocation of Approval

10 When a mis-declaration of a gross mass is notified to the DGP&S, the “approved” shipper will be asked to explain the non-compliance and depending on the severity or number of non compliances the “approval” will be revoked and shipper will have to use Method 1.

Annex 3 - Methods for obtaining the verified gross mass of a packed container

Method 1 Weighing the packed container

1 The Pakistan common standard for weighbridges in all four Provinces are enforced by following Ordinance/Acts;

- i) Punjab: Weights and Measures Ordinance 1965
- ii) Sind : The Sind Standard Weight & Measuring Enforcement act 1975
- iii) KPK : Standard Weights & Measures (Enforcement) Act 1976
- iv) Baluchistan: Baluchistan Weights & Measures (International System) Enforcement Ordinance 1977

2 In addition, for the purposes of this guidance, it will be the responsibility of the weighing instrument operator (e.g. weighbridges, load cell sensing technologies etc.) to ensure that the equipment has a documented procedure for maintenance, calibration and testing of the equipment and the associated records should be kept, as laid down in the above ordinance/act and rules made under the power of the relevant section.

Method 2 Certification and Approval Procedures for the calculation of the verified gross mass of a packed container

Introduction

The following process methods shall be deemed acceptable to fulfil the requirements to establish a verified weight:-

- 1 physically weighing goods on calibrated and certified equipment, in accordance with manufacturers recommended practices or appropriate ISO standards
- 2. equivalent/homogenous goods with a known weight per pallet (or other transport unit)

Certification and Approval of the calculated method by the DGP&S

1 The certification of the calculation method described below will need to be undertaken subject to DGP&S approval of the process as detailed in Annex 2

2 Additional requirements may be specified by the DGP&S following consultation with the shipper but the DGP&S will accept the use of existing audit based schemes as the basis for authorising a shipper to become an approved shipper for use of Method 2.

Calculation of the gross mass of the packed container

Step 1 – weight of the cargo

The weight of the cargo items to be shipped is to be obtained by adding the weight of the individual items together. In the case of bulk products the weight may be obtained from the production process, by metering through calibrated filling devices or by weighing the product.

Step 2 – weight of packaging

The weight of the packaging is either obtained from the manufacturer of the packaging material or based on shippers' / forwarders' data, as verified and captured in the company's system.

Step 3 – weight of pallets, securing materials and dunnage

The weight of pallets, packing materials, securing devices such as shoring poles and dunnage is either obtained from the manufacturer, based on shippers' / forwarders' data or preferably weighed and captured in the system. In all cases it is the shipper's responsibility to consider the validity of such data.

Step 4 – tare weight of the empty container

The shipper should use the tare weight indicated on the container

Step 5 – gross weight of the loaded container

The weights obtained in steps 1 to 4 above should then be added to obtain the gross mass of the packed container.

Accuracy of the calculation of the verified gross mass of a packed container

1 In the calculation method, the different weights that are added together to establish the sum of the gross weight are subject to variation. For example, the weight of wooden pallets, dunnage and blocking bars depends on the humidity.

2 All weighing devices used to determine the weight of the individual components and some minor differences in the tare of the empty container as well as cargo items contribute to these deviations.

3 It is recognised that there may be potential deviations in this methodology for determining the verified gross mass of a packed container and these should be documented and addressed as part of the shipper's management procedures.

4 Notwithstanding these potential deviations in the gross mass of a packed container, nothing shall derogate from the shipper's responsibility to establish accurately the verified gross mass of the packed container, in accordance with SOLAS VI Reg. 2.

Annex 4 - Bibliography and supplementary information

The list of topics below, is indicative and not exhaustive and the types of information described below are of an informative nature. As it is expected that they will be supplemented or amended as the Pakistan experience of implementing the new SOLAS provisions progresses.

Specific questions on, for example, application for approval under Annex 2 should be made to dgps@gmail.com

- 1 Weighbridges
- 2 ILO/IMO/UNECE CTU Code and associated informative material:
- 3 IMO MSC 1/Circ.1475 Guidelines regarding the verified gross mass of a container carrying cargo
- 4 DGPS on-line database of approved Method 2 shippers
- 5 SOLAS VI Regulation 2 amendment
- 6 ISO Quality Management System 9001/28000 Security Management System
- 7 International Convention for Safe Containers (CSC)