SUMMARY

Executive summary: In response to DSC 16’s request, this document discusses whether and how to amend SOLAS to require verification of containers’ actual weight before loading onto a ship regulated by SOLAS.

Strategic direction: 5.2

High-level action: 5.2.3

Planned output: DSC 16/2/1, paragraphs 2 (7) and 8

Action to be taken: Paragraph 41

Related documents: MSC 89/25; MSC 89/22/11; MSC 89/22/17; DSC 16/2/1; DSC 16/14; and DSC 16/15.

Introduction

1 MSC 89, having considered document MSC 89/22/11 (Australia, Denmark and the Netherlands), which included the verification of proper container weight used on the shipboard loading computers amongst its recommendations, and taking into account the comments provided in document MSC 89/22/17 (ICS and WSC), agreed to include, in the post-biennial agenda of the Committee, an output on "Development of measures to prevent loss of containers", with a target completion year of 2013, assigning the DSC Sub-Committee as the coordinating body, in association with the DE, SLF and STW Sub-Committees as and when requested by the DSC Sub-Committee.

2 Furthermore, the Committee instructed DSC 16 to give preliminary consideration to this issue under agenda item 14 "Any other business", taking into account the above documents.
and the effect this output may have on the work related to the development of a new mandatory Polar Code, and include the output in the provisional agenda for DSC 17.

3 MSC 89, in approving the proposed output and forwarding the recommendations of MSC 89/22/17, agreed that, as part of the new work item, the Committee should consider possible amendments to SOLAS to ensure verification of a loaded (“stuffed”) container’s actual weight prior to vessel loading.

4 Upon considering document DSC 16/14 (WSC, ICS and BIMCO), DSC 16 invited WSC, ICS and BIMCO to submit a proposal for consideration at DSC 17, after taking into account comments made in plenary and after consulting with other interested parties and governments.

Summary

5 This submission is made in response to the aforementioned request by DSC 16. It briefly summarizes the issue of misdeclared container weights and, discusses the different views received during the consultation process discussed in paragraph 4, and proposes for DSC 17’s consideration an amendment to SOLAS and accompanying guidelines to address the problem of misdeclared container weights.

Existing Practices and Regulatory Obligations

6 SOLAS Regulation VI/2 requires the shipper of containerized goods to provide the ship’s master or his representative with the gross mass of the container, prior to loading on the ship and confirmed in writing and by appropriate shipping documents. Furthermore, the regulation requires that the shipper shall ensure that the gross mass of the loaded (or “stuffed”) container is in accordance with the gross mass declared on the shipping documents.

7 Regulation VI/2 does not require that a container loaded with cargo be weighed to verify its weight.

8 Most container stuffing facilities do not possess scales or other equipment that can weigh the container once it is loaded with cargo. Approved container weighing scales may or may not be located on the roadways or railways that connect the shipper’s facilities with the export port facility.

9 Most stuffed cargo containers delivered to port facilities for export have not been weighed to verify their weight prior to their delivery to the port facility. Unless such containers are weighed, the vessel and the port facility rely on the shipper’s weight declaration.

10 Some shippers, particularly repetitive shippers of homogenous cargoes, can provide reasonably accurate weight declarations; however, substantial disparities between declared and actual container weights are not uncommon, and they create safety and operational issues for the vessel, other cargo, the crew, and for shore-side operations in ports. Misdeclared container weights can also present land-side safety and operational problems both en route to the port of export and in importing nations when such containers exceed local road, bridge or other weight restrictions.

11 The vast majority of container vessels do not have cranes or other equipment that can weigh containers. Thus, by necessity, container vessels must rely on any container weight verification to be performed onshore.
12 Vessel stowage plans today therefore include container weights that may be based either on an actual weighing of the stuffed export container by the port facility or by the shipper, or on the shipper’s declared weight based on the shipper’s estimate, or in some cases on a weight that the vessel operator may, from experience, believe is a more reasonable estimate for the declared cargo in the container than the shipper’s declaration.

13 As noted in paragraph 6 above, Regulation VI/2 addresses the issue of container weights by requiring containerized cargo shippers to provide an accurate container weight declaration. Shippers, however, are generally located outside the effective regulatory reach of the SOLAS ship-port regulatory interface. The shipper may be domiciled in a jurisdiction beyond the port state where the ship is being loaded. The co-sponsors are aware of no SOLAS signatory that institutes enforcement actions against shippers under Regulation VI/2 for providing substantially incorrect container weights.

14 Regulation VI/5 regulates the stowage and securing of containers aboard a vessel. Although many, if not most, port facilities have scales or other equipment capable of weighing loaded export containers upon receipt or during yard operations, a very substantial percentage of loaded containers are not weighed. Neither Regulation VI/5, Regulation VI/2, nor any other provision of SOLAS requires weighing a loaded container prior to vessel stowage.

Considering a Possible SOLAS Amendment

15 In deciding to forward the referenced documents listed above, MSC 89 requested the Sub-Committee, as part of the new work item, to consider possible, specific amendments to SOLAS to ensure verification of a loaded (“stuffed”) container’s actual weight prior to vessel loading.

16 In response to DSC 16’s request, WSC, ICS and BIMCO considered various ways that SOLAS Chapter VI (“Carriage of cargoes”), Part A, might be amended to address this issue and consulted with those Member Governments that had spoken at MSC 89 and DSC 16 in support of considering the question, and with other interested industry parties.

17 Two principal issues must be addressed in developing any proposed amendment to SOLAS to ensure that the weight of loaded containers is known and verified prior to vessel stowage:

- One issue is: What is needed to verify the container’s weight? In essence, the question here is whether the container weight to be used for container handling in the port and for vessel stowage is: a) what the shipper declares the container weight to be, or b) what a weight scale or other weighing device says the actual weight is.
- The second issue is: Which party or parties should bear what new SOLAS obligation regarding verification of container weights?

18 The view of the co-sponsors is that the way to ensure that ships and port facilities have accurate, verified container weights prior to vessel stowage is to weigh the container. The three logical choices for assignment of SOLAS requirements are the shipper of the goods, the port facility that receives the container and loads the container onto the container ship, and the ship’s master (or his representative). The view of the co-sponsors is that all three should have SOLAS responsibilities.

Further SOLAS Regulation of the Shipper

19 SOLAS has addressed the issue of container weights by imposing an obligation on the shipper to provide a container weight declaration via Regulation VI/2; however, it does not require a container to be weighed. As previously discussed, it is not uncommon for a shipper’s declared weight to be incorrect, for the incorrect weight to be used by the ship and
the port facility in the handling and stowage of the container, and for the incorrect weight to be the cause or a contributing cause to operational and safety incidents and accidents. Examples of incidents involving misdeclared container weights are included in an INF paper submitted to DSC 17.

20 The existing premise of Regulation VI/2 is that the only party with a regulatory responsibility to provide an accurate weight of a loaded container is the shipper. All parties acknowledge that the status quo results in a significant number of containers having significant weight misdeclarations, and that such misdeclarations can create significant safety problems.

21 During our consultations, the range of different views about the appropriate responsibility of the shipper included: 1) leave it to the shipper’s discretion to either weigh the loaded container or to calculate the gross mass of the container (i.e., essentially the status quo); 2) require the shipper to weigh the loaded container and provide a certified weight certificate to the port facility and ship as a condition for it being loaded onto the ship for export or as a condition for acceptance into a port facility; and 3) certify shippers by “a competent authority” as having procedures in place that could be trusted to produce reliably accurate container weight declarations, and if a shipper were not so certified, require its containerized cargo shipment to be weighed.

22 During our consultations, the views of various shipper representatives included the following:

- Some shippers have noted that, although they do not weigh the container after they have stuffed and sealed it, their cargo weight declarations are reasonably accurate because they know the number and the weight of the cargo units that have been loaded into the container and the tare weight of the empty container, and that they should not be subjected to further regulatory requirements because other shippers’ weight declarations are inaccurate;

- Most shippers do not have weigh scales at their container stuffing locations, and further, even if scales are available within the country where the shipper is domiciled, they may not be conveniently located between the container stuffing location and the receiving port facility.

- It would be impractical for the tens of thousands of different shippers of containerized goods around the world to install container weighing devices on their premises.

- Some shippers stated that they would have no objection to or would actively support port facilities weighing containers that had not previously been weighed, because port facilities are the “choke points” through which all container traffic must pass, because it would be efficient to weigh the containers at that point, because port facilities have container weighing technology, and because port facilities have a self-interest in knowing the accurate weight of the containers that they handle for the safety of terminal operations and for vessel stow planning purposes. This approach, however, would admittedly create a new SOLAS regulatory responsibility on ships and on port facilities.

23 There are a number of problems with continuing Regulation VI/2’s current shipper-centric approach to obtaining accurate container weights. One is jurisdiction and effective enforcement. There is no effective port state or flag state enforcement of shippers’ current SOLAS Regulation VI/2 requirements. There is little reason to believe that future enforcement of a SOLAS requirement applicable only to the shipper to ensure container weight verification would be more effective. Another problem is that, unless ships and
marine terminal operators are required to know and use the verified, actual container weight as a condition for loading containers onto ships, the SOLAS regulatory system will continue to tolerate loading containers with misdeclared weights. A calculated or estimated container weight, even if required to be included in some sort of shipper issued weight declaration, would not provide assurances that containers with misdeclared weights will not continue to be loaded aboard ships.

24 We also note that some suggestions received during our consultations for amending Regulation VI/2 had the potential to be so disruptive to commerce as to be unacceptable or worse for commerce than maintaining the status quo. For example, one concept was to amend SOLAS to provide that, if a container, upon arrival at the marine terminal, is not accompanied by a shipper provided weight certificate documenting a container’s actual gross weight, it should be refused and denied port entry by the terminal operator. Because the vast majority of export containers today have not been weighed when they arrive at the load port, and because most shippers do not have or do not have access to scales beyond the port facility, such a concept would cause most export containerized goods to be refused for vessel loading.

Further SOLAS Regulation of the Ship and Port facility Operator

25 Because Regulation VI/2’s attempt to address this issue by focusing solely on the shipper has not been sufficiently effective, any change to SOLAS must consider the appropriate obligation of ships and port facilities in addressing the issue.

26 As noted above, the vast majority of container ships do not have cranes and must depend on shore-side procedures and equipment to verify a loaded container’s weight. Amending SOLAS to establish a new obligation only on the ship would be insufficient. For example, amending SOLAS to require a ship’s master not to load a stuffed export container unless the master has a verified weight of that container would be insufficient and deficient because such an amendment would not provide a solution. A comparable and parallel SOLAS obligation should be assigned to the only other party subject to effective SOLAS regulation and enforcement with the capability to verify a container’s weight once it takes custody of the container, namely the port facility responsible for loading the container aboard the ship. Further, it would be illogical to create a SOLAS obligation on the ship to require that all containers be weighed before vessel loading, but allow the terminal operator to load an unweighed box onto the ship in wilful ignorance of the container’s weight.

27 In this regard, prior discussions at MSC and DSC have noted that port terminals have a role to play in solving the problem of misdeclared container weights.

- For example, the MARIN “Lashing@Sea” report that was considered at DSC 15 (documents DSC 15/16/1 and DSC 15/INF.2) specifically noted the need to weigh containers upon entry to the terminal (page 44 and page 46 of the report);

- The International Chamber of Shipping and the World Shipping Council jointly produced a document: “Safe Transport of Containers By Sea: Guidelines on Best Practices”, which was published at the end of 2008 and presented to MSC in December 2008. Chapter 7 of the Guidelines includes a description of best practices of Marine Terminal Operations, specifically noting:

“7.5: The terminal should undertake the following actions at the first entry gate of the export yard, or while the container is in the terminal and before it goes onto a ship: …

- Verify the container weight against documentation by use of a weighbridge or weight gauge/load indicator on yard equipment or,
Alternatively, verify that weighing has occurred before entry and that such weighing was compliant with accepted best practice.”

At its May 2010 meeting, the MSC endorsed these Guidelines on Best Practices and encouraged that they be made available on board all ships carrying containers (document MSC/87/26).

- Document MSC 89/22/17 (WSC and ICS), while supporting the proposed output in document MSC 89/22/11, recommended that in order to avoid any uncertainty it should be clarified “that consideration of a requirement for weighing of loaded containers prior to vessel loading lies within its scope. The marine terminal may not need to weigh a container that has already been weighed prior to its arrival at that marine terminal, but if it has not been weighed prior to arrival, it should be weighed prior to vessel loading”.

- The official report of MSC 89 states that MSC 89 agreed to include the proposed output in the post-biennial agenda following consideration of document MSC 89/22/11 “and taking into account comments provided in document MSC 89/22/17”.

- When DSC 16 considered document DSC 16/14 (WSC, ICS and BIMCO), no delegation spoke in opposition to the proposition to include the port facility under the proposed container weighing verification requirement. The official report of DSC 16 states that DSC 16, upon consideration of document DSC 16/14 (WSC, ICS and BIMCO) “providing observations and comments intended to assist the Sub-Committee in its consideration of the mandatory container weighing component of the new output and recommending that SOLAS be amended to require verification of containers’ actual weight before loading onto a ship regulated by SOLAS…. [and] having reconfirmed the importance of, and need for, correct declaration of weights for carriage on board ships, invited WSC, ICS and BIMCO and others to submit a definitive version of their proposal, taking into account comments made at the session, for consideration at DSC 17” (document DSC 16/15, paragraph 14.6).

28 If SOLAS were to be amended to require loaded export containers to be weighed before being stowed on a ship, it would be logical to include an obligation, not only on shippers and on ships’ masters, but also on terminal operators that have accepted containers whose actual weight have not been previously verified as documented by a weight certificate. They are the only parties who can weigh a container once it is in the port facility. If terminal operators face no regulatory obligation and are free to load containers aboard ships without verified weights, effective change is unlikely to be achieved.

29 There is IMO precedent for assigning a role for the port facility in this area:

- SOLAS Chapter VI, Part B (special provisions for bulk cargoes other than grain) imposes a joint obligation on the terminal and the master to agree on “a plan which shall ensure that the permissible forces and moments of the ship are not exceeded during the loading and unloading”; this plan shall be lodged with the port state. Further, “the master and terminal representative shall ensure that loading and unloading operations are conducted in accordance with the agreed plan”. These provisions are obviously intended to improve vessel stability and the safety of the

---

1 The Freight Transport Association (FTA)’s 2011 publication, “Working with containers. An FTA best practice guide”, which has been endorsed by the Global Shippers’ Forum (GSF), similarly makes the recommendation that “unless containers for export arrive at a port facility with a weight ticket supplied by an accredited source, routine weighing of containers needs to be built into port handling procedures”. 


ship, its crew, its cargo and shore side personnel -- the same concerns and objectives that a mandatory SOLAS container weighing requirement would be intended to address for container ships. Existing Part B reflects an IMO acceptance of a regulated “ship-terminal interface” regarding loading of bulk cargoes. There is no reason why Part A of the very same SOLAS Chapter could not be amended with a container weight verification requirement based on the same, and accepted, “ship-port interface.

- The ISPS Code also embodies the IMO’s acceptance of establishing mandatory regulations on port facilities through the aforementioned ship-terminal interface. The logic and precedent of the IMO establishing appropriate regulatory obligations on terminal operators within the parameters of the “ship-port interface” is well established.

30 Terminal operator representatives expressed various concerns during the consultations. Some of these concerns, in our opinion, have merit and can be addressed in an amendment to SOLAS and/or the accompanying guidelines. These include: 1) the need for a terminal operator (and ocean carrier) to be able to rely in good faith on a shipper provided container weight certificate and not be held responsible if that certificate is inaccurate; 2) the need to establish a reasonable time period to plan for implementing a container weight verification regime; and 3) the ability of terminal operators to negotiate, as part of their contractual arrangements for the handling and loading of containers, container weighing cost recovery with their vessel operator customers in instances where, according to those arrangements, the container weighing is undertaken by the terminal operator, rather than having SOLAS impose the costs as a matter of regulation solely on the terminal operator.

Consideration of a Broader SOLAS Regulation

31 WSC, ICS and BIMCO developed a draft recommendation for possible consideration at DSC 17 to amend Regulation VI/5 to require, as a condition for loading a stuffed export container on board a ship, that the ship’s master (or his representative) and the port facility representatives have a verified actual weight of the container which documents both that the container has been weighed and its actual weight.

32 The rationale for this approach was: 1) that the way to verify the weight of a stuffed container is to weigh it; 2) that Regulation 5 is the appropriate regulation to amend because it establishes the regulatory obligations governing the loading of ships; 3) there is effective port and flag state enforcement of such an obligation, while enforcement of SOLAS obligations solely on shippers outside the ship-port interface is difficult at best and non-existent at worst; 4) it would cover all three essential parties: the shipper, the port facility, and the ship, leaving none of them outside the zone of regulatory responsibility; 5) it would allow the obligation to be met by the shipper obtaining a weight verification, while recognizing that many shippers will find this impractical and in such cases imposed an obligation on the vessel and the port facility; and 6) it would institutionalize a routine practice that all containers’ actual verified weight be known by all responsible parties before containers are stowed aboard a ship.

33 The technology to weigh containers in port facilities exists. Many ports already have weigh scales at their “in-gates” and increasingly, they have them on container repositioning and lifting equipment. In some locations, like the United States, mandatory export container weighing has been implemented for years without undue cost or impairment of efficient port operations.

34 During our consultations, some port terminal operators did not support creating a regulatory obligation on them.
35 During our consultations, the International Transport Workers Federation (ITF) and the International Association of Ports and Harbors (IAPH) expressed support for our proposal. In addition representatives of U.S. port terminals, which weigh all their loaded export containers but receive unweighed import containers, supported our proposal.

36 Various Member Governments with whom we consulted expressed various reservations about our proposal. Some did not agree that container weight verification requires weighing all loaded containers. Some were not prepared at this time to support creating a port state SOLAS regulatory obligation on marine terminals with respect to container weight verification. Some expressed the view that the appropriate section of SOLAS to amend is Chapter VI, Part A, Regulation VI/2 dealing with Cargo Information, rather than Regulation VI/5 dealing with stowage and securing.

37 One Member Government expressed a desire to explore a concept under which: a) shippers, upon auditing and certification pursuant to a defined regulatory procedure, could be trusted to declare a reasonably accurate estimated weight without having to weigh their containers; and b) all other uncertified shippers’ containers would be subject to a SOLAS requirement that would prohibit ships and port facilities from loading their containers aboard a ship unless the container had a certified weight certificate obtained by weighing the container. Time did not permit to garner the possible interest amongst Member Governments for such a certification concept or to further develop it to define: how such a shipper certification regime would be created, monitored and enforced; or how ship and marine terminal operations would know which containers, originating from a multitude of jurisdictions, required weight certificates and which did not, in a predictable and efficient manner that would not impair a port’s operational efficiency. These issues would, we believe, present significant complexities.

Proposal in Response to DSC 16’s Request

38 We wish to express our appreciation for the candid and instructive communications received from Member Governments and other industry parties during our consultations on this subject.

39 While our consultations demonstrate that there is not presently a clear consensus on how SOLAS should be amended to address this issue, the co-sponsors believe that there is a growing recognition that: 1) the problem of misdeclared container weights warrants an amendment to SOLAS; 2) that shippers, ships and terminal operators each have an appropriate responsibility to address the issue; and 3) that a compromise proposal that effectively addresses the problem can be identified.

40 In an effort to facilitate continued progress, the co-sponsors offer for DSC 17’s consideration the attached proposed SOLAS amendment (Annex 1) and draft guidelines for its implementation (Annex 2). This proposal seeks to accommodate the various different perspectives obtained during our consultations, and if adopted, would significantly improve safety of container shipping, safety of container ship operations, and safety of those shoreside workers and operations handling containers in ports. Specifically, the proposal would ensure several of the benefits identified in MSC 89/22/11 regarding this work item, i.e., container weight will have been verified before loading; the actual weight will be included in

\[ \text{MSC 89/22/11 regarding this work item, i.e., container weight will have been verified before loading; the actual weight will be included in} \]

2 While the weight of the cargo loaded into the container will vary, the tare weight of the container itself will not. Container and terminal operators will have procedures in place establishing the tare weight of empty containers depending on the size and type of containers. ISO 6346 also requires the marking of a container to include its tare weight. Consequently, there is no need from a safety perspective to require empty containers to be weighed. The ensuing recommendations should thus be read to address weighing of containers loaded (“stuffed”) with cargo.
the cargo manifest and used for cargo planning; documentation can be obtained by the carrier at will; the reliability of stow and vertical weight distribution will be improved; and a mutual understanding will be established on the interface between shore section’s and vessel’s responsibilities in order to maximize reliability of gear and timely lashing application. For these reasons, the proposal should also substantially reduce the number of containers lost overboard or damaged, thereby also reducing the extreme costs induced by such occurrences. Finally, and with reference to paragraph 30, the co-sponsors believe that it would be appropriate for the effective date of the proposed SOLAS amendment to be a reasonable time period after its entry into force.

**Action Requested of the Sub-Committee**

41 The Sub-Committee is invited to consider the above proposals and take action as appropriate.
ANNEX 1

PROPOSED AMENDMENT TO SOLAS CHAPTER VI, PART A, REGULATION 2

Add a new paragraph 4 as follows:

“4 A freight container containing cargo shall not be loaded aboard a ship unless the master or his representative and the terminal representative¹ have the verified gross weight of the container obtained by a weighing of the container. Such verified weights shall be available sufficiently in advance of vessel loading to be used in the vessel stowage plan.” *)

¹ For the purpose of this regulation, *terminal representative* shall have the same meaning as in Regulation 7 of part B of this Chapter”.

*) Refer to MSC/Circ. XXX, [title of Circular].
ANNEX 2

DRAFT GUIDELINES REGARDING VERIFIED CONTAINER WEIGHTS

1. A freight container loaded with cargo may not be stowed aboard a ship to which the present SOLAS regulations apply unless the master or his representative and the terminal representative have the verified actual gross weight of the container in advance of vessel loading.

2. “Verified actual gross weight” means the total weight of the loaded (“stuffed”) container as obtained by using a scale, weighbridge, lifting equipment or any other device capable of determining the actual weight of the container and as documented in a weight certificate. The weight certificate may be in electronic format.

3. The scale, weighbridge, lifting equipment or other devices used to determine, and document, the actual gross weight of the container should comply with local, applicable regulatory requirements.

4. In order to provide the greatest safety benefits throughout the supply chain, it is generally recognized that the best time to verify the actual gross weight of a container is as soon as practicable after the cargo stuffing process has been completed and the container has been sealed.\(^1\)

5. The weight certificate (if it exists) should accompany the container shipment’s documentation and delivery to the next party taking custody of the container.

   A. If a container is transported by road, rail or a non-SOLAS vessel to a port terminal facility, the weight certificate (if it exists) should accompany the shipment documentation and be delivered to a representative of the port terminal facility. The ship’s master and port terminal facility may rely on such a weight certificate for compliance with these SOLAS regulations. If the container is delivered to a port terminal facility without a weight certificate, the ship’s master and the port terminal facility will need to obtain the actual gross weight of the container before the container may be loaded aboard a ship. They should agree between themselves how this will be done, including the apportionment of the costs involved.

   B. If a container is delivered by a SOLAS ship to a port terminal facility for transshipment onto another SOLAS ship, each container being delivered is

\(^1\) Best practices regarding packing of containers can be found in the “IMO/ILO/UNECE Guidelines for Packing of Cargo Transport Units (CTUs)”. (The Guidelines are currently being revised to become a Code of Practice with a target publication date of 2013).
required by SOLAS Regulation VI/2 to have a verified gross actual weight before loading onto the delivering ship. Duplicative weighing of the same loaded container in the transshipment port facility is not necessary. The delivering vessel shall inform the port terminal facility in the transshipment port of the verified actual gross weight of each delivered container carrying cargo. The master of the SOLAS ship onto which the transshipped containers are to be loaded and the port terminal facility in the transshipment port may rely on the information provided by the delivering SOLAS vessel. Existing ship-port communication systems may be used for the provision of such information in agreement between the commercial parties involved.

6. The verified actual gross weight of the container should in all cases discussed above, and as a condition for stowage onto the SOLAS ship, be made available to the port terminal facility representative and to the ship’s master or his representative in sufficient time for the verified container weight information to be used in the final vessel stow plan for the ship. The finalization of the vessel stow plan, and thus the availability of the verified container weight information, will depend on vessel type and size, local port stowage procedures, trade lane and other discretionary factors subject to agreement between the commercial parties involved.

7. Discrepancies between a container’s declared weight and its verified actual gross weight should be resolved by use of the verified actual gross weight. Ultimately, and in conformance with the Code of Safe Practice for Cargo Stowage and Securing, the ship’s master should accept the cargo on board his ship only if he is satisfied that it can be safely transported.

8. Pursuant to SOLAS regulation VI/5, a freight container shall not be loaded to more than the maximum gross weight indicated on the Safety Approval Plate under the International Convention for Safe Containers (CSC), as amended. A freight container exceeding its maximum gross weight shall not be stowed onto a ship.

9. If a freight container is weighed by a scale that also includes the weight of a container chassis, the weight of the chassis shall be subtracted to obtain the verified actual gross weight of the container to be documented in a weight certificate.

10. A master or his representative and terminal representative should enter into arrangements for the handling and stowage of containers to ensure the prompt transmittal and sharing of verified container weight information so that the vessel stowage planning and the vessel loading operations are based on such verified actual gross weights of the containers. Existing communication systems may be used for the transmission and sharing of such container weight information in agreement between the commercial parties involved.

11. For empty containers, the tare weight shall visually appear on the container in accordance with the International Standard Organization’s standard for container marking and identification (ISO 6346) and shall be used.