#### **NOTICE 440 OF 2006**

Draft Merchant Shipping (Safe Containers Convention) Bill and Reaulations: For comment

South African Maritime Safety Authority

### Draft Merchant Shipping (Safe Containers Convention) Bill and Regulations: For comment

The South African Maritime Safety Authority (SAMSA) publishes for public comment the proposed measures set out in the accompanying Schedule. Written submissions should reach SAMSA on or before **12** May **2006** (Note: late submission may be disregarded). These should be addressed to **the** Chief Executive Officer (for the attention of Mr C Briesch) and may be either:

- hand-delivered to SAMSA, 161 Lynnwood Road, Brooklyn 0181, Pretoria; or
- mailed to SAMSA, PO Box 13186Hatfield 0028; or
- faxed to (012) 366 **2601**; or
- emailed to <u>cbriesch@samsa.org.za</u>.

Telephonic enquiries should be directed to Mr C Briesch at (012) **366 2624.** Attention is invited to the explanatory memorandum accompanying the Bill in **Part** 1 of **the** Schedule.

#### **Schedule**

#### **Contents**

Part 1 Draft Merchant Shipping (Safe Containers Convention) Bill, 2006

Part 2 Draft Merchant Shipping (Safe Containers Convention) Regulations, 2006

# Part 1 Draft Merchant Shipping (Safe Containers Convention) Bill, 2006

#### BILL

To give effect to the International Convention for Safe Containers, and for related matters.

**BE IT ENACTED** by the Parliament of the **Republic** of South Africa, as follows:—

#### **Definitions**

- 1. (1) In this Act, unless the context indicates otherwise—
- (i) "applied provisions of the Convention" means the provisions of the Convention that, in terms of section 5, have the force of law as part of the law of the Republic;
- (ii) "Authority" means the South African Maritime Safety Authority established by section 2(1) of the South African Maritime Safety Authority Act, 2998 (Act No. 5 of 1998);
- (iii) "container" means a container as defined in the Convention and to which the Convention applies;
- (iv) "Contracting State" means a state specified in a notice under section 4;
- (v) "contravene", in relation to a provision of this Act, includes failing or refusing to comply with the provision;
- (vi) "inspector" means a person designated as an inspector under section 7;
- (vii) "Minister" means the Minister of Transport;

- (viii) "organ of state" has the meaning it has in section 239 of the Constitution of the Republic of South Africa, 1996;
- (ix) "the Convention" means the International Convention for Safe Containers set out in Part 1 of the Schedule and, after the commencement of Part 2 of the Schedule, as amended by that Part;
- (x) "the Republic" includes the Prince Edward Islands referred to in section 3:
- (xi) "this Act" includes the regulations.
- (2) Unless the context indicates otherwise, an expression used in this Act and in the Convention (whether or not a particular meaning is given to it **by** the Convention) has, in this Act, the meaning it has in the Convention.

#### **Act binds State**

2. This Act binds the State and every organ of state.

#### **Operation of Act**

- 3. (1) This Act extends to the Prince Edward Islands within the meaning of section 1 of the Prince Edward Islands Act, 1948 (Act No. 43 of 1948).
- (2) In its application to those Islands, transport between places in the Republic and places in those Islands is taken to be international transport within **the** meaning of Article II, paragraph 6 of the Convention.

#### **Declaration of Contracting States**

- **4.** (1) The Minister may, by notice in the *Gazette*, declare that, for the purposes of this Act, a state, other than the Republic, specified in the notice is a state party to the Convention.
- (2) A notice under subsection (1) is evidence that a state specified in the notice is a state party to the Convention.

#### Certain provisions of Convention have force of law

**5.** Subject to this Act, Articles II to VI of the Convention have the force of law as part of the law **of** the Republic.

#### Regulations to give effect to applied provisions of Convention

- **6.** (1) The regulations may prescribe matters necessary or convenient for carrying out or giving effect to the applied provisions of the Convention.
- (2) Without limiting subsection (1), the regulations may make provision about—
- the detention and transportation of containers that do not carry a valid Safety Approval Plate as required by the Convention;
- (b) the detention and transportation of containers in respect of which there is significant evidence that the condition of the container creates an obvious risk to safety;
- (c) the maintenance and repairing of containers;
- (d) the circumstances and the manner in which the Authority may dispose of detained containers that have not been repossessed by the person entitled to possession;
- (e) requiring that the Safety Approval Plate affixed to any or all containers approved in terms of this Act be in one or more of the official languages of the Republic; and

- (f) the circumstances in which the Authority must obtain the consent of another specified authority in the choice of the person or persons to be authorised to conduct an inquiry under section 10(7).
  - (3) However, a regulation may not—
- (a) authorise a person to prevent the removal of the contents of a container; or
- (b) authorise the continued detention of a container after its contents have been removed, except if an inspector believes on reasonable grounds that there is about to be a contravention of a regulation about the transportation **d** containers made under subsection (2)(a) or (b).

#### Inspectors

- 7. (1) The Authority may designate as an inspector for the purposes of this Act any person who, in the Authority's opinion, is qualified to be so designated.
- (2) The Authority must give every inspector a certificate attesting to his or her designation as an inspector setting out the provisions of this Act and the Convention that the inspector is authorised to enforce.
- (3) When boarding any vehicle or entering any place described in section 8(1), an inspector must, if so required, show the certificate to the person in charge the vehicle or place.

#### **Powers of inspectors**

- 8. In addition to any powers that he or she may have under the regulations, an inspector may, without a warrant, at any reasonable time—
- (a) go on board any vehicle, including a ship, train, truck or aircraft, or enter any place in which he or she believes on reasonable grounds that—

- there is significant evidence that the condition of a container creates an obvious risk to safety; or
- (ii) a provision of this Act has been contravened;
- (b) go on board any vehicle, including a ship, train, truck or aircraft, or enter any place in which he or she believes on reasonable grounds there is a container, for the purpose of verifying that the container carries a valid Safety Approval Plate as required by the Convention; and
- (c) examine any record or document required by the regulations to be kept, and make copies or extracts.
- (2) The owner or person in charge of any vehicle boarded or place entered by an inspector and every person found therein must give the inspector all reasonable assistance to enable the inspector to perform his or her functions under this Act and must provide the inspector with any information that he or she may reasonably require with respect to the administration of this Act.

#### Obstruction of inspectors

- 9. (1) No person may obstruct or hinder an inspector in the performance of his or her functions under this Act.
- (2) No person may knowingly make any false or misleading statement, either orally or in writing, to an inspector engaged in the performance of his or her functions under this Act.
- (3) Unless authorised by an inspector, no person may remove or interfere in any way with a container detained by an inspector under the regulations.

#### **Authority may direct inquiry**

**10.** (1) If an accident or incident involving a container results in death or injury to any person, danger to the health or safety of the public or damage to property or the environment, the Authority may

33

direct an inquiry to be made into the accident or incident and may, subject to the regulations, authorise to conduct the inquiry any person or persons who in the Authority's opinion are qualified to be so authorised.

- (2) For an inquiry, the person or persons authorised by the Authority under subsection (1) have all the powers conferred upon a court of marine enquiry by subsections (1)(i) to (vi) and (4) of section 9 of the Merchant Shipping Act, 1951 (Act No. 57 of 1951), and subsections (2) and (3) of that section apply accordingly.
- (3) As soon as possible after the conclusion of an inquiry, the person or persons authorised to conduct the inquiry must give a report with recommendations to the Authority, together with all the evidence and other material that was before the inquiry.
- (4) The report must be published by the Authority within 60 days after its receipt by the Authority, unless the report contains a recommendation that publication be withheld in the public interest, in which case the Authority may withhold publication of the report in whole or in part as it thinks fit.
- (5) However, if the concurrence of another person was obtained in relation to the choice of the person or persons to be authorised to conduct an inquiry, the report, or any portion thereof, may not be published unless that other person consents to publication.
- (6) The Authority may supply copies of a published report in the manner and on the terms that it thinks proper.

#### Regulations

- 11. The Minister may make regulations prescribing matters—
- (a) required or permitted by this Act to be prescribed; or
- (b) necessary or convenient to be prescribed for carrying out or giving effect to this Act.
- (2) (a) A regulation may make provision in terms of any document that the Minister or the Authority considers relevant from

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time to time, without stating the text, by mere reference to the number, title and year of issue of that document or to the other particulars by which that document can readily be identified, and any provision **so** made is, in the absence of a contrary intention, taken to have been made in terms of the relevant document as revised or re-issued from time to time.

- (b) A copy of the complete text of each document, as revised or re-issued from time to time, in terms of which provision is made under paragraph (a), is to be kept at the place or places in the Republic that the Authority directs and is to be available for public inspection.
- (c) To avoid doubt, section 31 of the Standards Act, 1993 (Act No. 29 of 1993), does not affect the operation of this subsection.

#### Offences and penalties

- 12. (1) **A** person **who** contravenes a provision of this Act commits an offence punishable upon conviction **by** a fine or **by imprisonment** for a period not exceeding **two** years.
- (2) Without affecting the jurisdiction of any court existing apart from this subsection, a court has jurisdiction over an offence in terms of this Act if—
- (a) the offence was committed in the territorial jurisdiction of that court;or
- (b) the accused is found or carries on business in the territorial jurisdiction of that court.
  - (3) If a person—
- (a) admits to the Authority that he or she has contravened a provision of this Act;
- (b) agrees to abide by the decision of the Authority; and
- (c) deposits with the Authority the sum required of him or her, which sum is not to exceed the maximum fine that may be imposed under subsection (1),

the Authority may, after the inquiry that it thinks fit, determine the matter summarily and may, without legal proceedings, order the whole or any part of the deposit to be forfeited by way of a penalty.

- (4) There is a right of appeal to the Minister against a determination or order of the Authority. This right must be exercised within 90 days from the date of the determination or order.
- (5) The imposition of a penalty under subsection (3) is taken not to be a conviction of an offence; however, no prosecution in respect of the offence in question may thereafter be instituted.
- (6) All fines and other money penalties imposed under this Act are to be paid to the Authority for the benefit of the Maritime Fund established by section 38 of the South African Maritime Safety Authority Act, 1998 (Act No. 5 of 1998).

#### **Duration of Act**

**13.** This Act continues in force until a day fixed by the President by proclamation in the *Gazeffé* ollowing denunciation of the Convention by the Republic or the termination thereof in accordance with Article XII.

#### Repeal of Act 11 of 1985

**14.** The International Convention for Safe Containers Act, 1985 (Act **No.** 11 of 1985), is repealed.

#### Short title and commencement

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- **15. (1)** This Act is called the Merchant Shipping (Safe Containers Convention) Act, 2006.
- (2) This Act commences on a day fixed by the President by proclamation in the Gazette; but the day so fixed in relation to Part 2 of the Schedule may not be a day before the day on which the amendments

to the Convention set out in that Part enter into force for the Republic in accordance with Article IX, paragraph 2(c) of the Convention.

#### **SCHEDULE**

(Section 1)

#### PART I

#### INTERNATIONAL CONVENTION FOR SAFE CONTAINERS.

#### Preamble

THE CONTRACTING PARTIES,

RECOGNIZING the need to maintain a high level of safety of human life in the handling, stacking and transporting of containers,

MINDFUL of the need to facilitate international container transport,

RECOGNIZING, in this context, the advantages of formalizing common international safety requirements,

CONSIDERING that this end may best be achieved by the conclusion of a convention,

HAVE DECIDED to formalize structural requirements to ensure safety in the handling, stacking and transporting of containers in the course of normal operations, and to this end

HAVE AGREED as follows:

#### **ARTICLE** I

#### General obligation under the present Convention

The Contracting Parties undertake to give effect to the provisions of the present Convention and the Annexes hereto, which shall constitute an integral part of the present Convention.

<sup>\*</sup>The present text incorporates corrections effected by the Procès-Verbal of Rectification of 25 June 1976 and amendments adopted by the Maritime Safety Committee of the International Maritime Organization, in 1981, 1983 and 1991 (MSC.20(59)).

#### **ARTICLE II**

#### **Definitions**

For the purpose of the present Convention, unless expressly provided otherwise:

- 1. "Container" means an article of transport equipment:
  - (a) of a permanent character and accordingly strong enough to be suitable for repeated use;
  - 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;
  - (d) of a size such that the area enclosed by the four outer bottom corners is either:
    - (i) at least 14 m<sup>2</sup> (150 sq ft), or
    - (ii) at least **7** m² (75 sq ft) if it is fitted with top corner fittings.

The term "container" includes neither vehicles nor packaging; however, containers when carried on chassis are included.

- 2. "Corner fittings" means an arrangement of apertures and faces at the top and/or bottom of a container for the purposes of handling, stacking and/or securing.
- **3.** "Administration" means the Government of a Contracting Party under whose authority containers are approved.
- **4.** "Approved" means approved by the Administration.
- **5.** "Approval" means the decision by an Administration that a design type or a container is safe within the terms of the present Convention.
- 6. "International transport" means transport between points of departure and destination situated in the territory of two countries to at least one of which the present Convention applies. The present Convention shall also apply when part of a transport operation between

two countries takes place in the territory of a country to which the present Convention applies.

- 7. "Cargo" means any goods, wares, merchandise and articles of every kind whatsoever carried in the containers.
- 8. "New container" means a container the construction of which was commenced on or after the date of entry into force of the present Convention.
- 9. "Existing container" means a container which is not a new container.
- **10.** "Owner" means the owner as provided for under the national law of the Contracting Party or the lessee or bailee, if an agreement between the parties provides for the exercise of the owner's responsibility **for** maintenance and examination of the container by such lessee or bailee.
- 11. "Type of container" means the design type approved by the Administration.
- 12. "Type-series container" means any container manufactured in accordance with the approved design type.
- 13. "Prototype" means a container representative of those manufactured or to be manufactured in a design type series.
- 14. "Maximum operating **gross** weight" or "rating" or "R means the maximum allowable combined weight **c** the container and its cargo.
- 15. "Tare weight" means the weight **d** the empty container including permanently affixed ancillary equipment.
- 16. "Maximum permissible payload" or "P" means the difference between maximum operating gross weight or rating and tare weight.

#### ARTICLE III

#### Application

1. The present Convention applies to new and existing containers used in international transport, excluding containers specially designed for air transport.

- **2.** Every new container shall be approved in accordance with the provisions either for type-testing or for individual testing as contained in Annex **J**.
- Every existing container shall be approved in accordance with the relevant provisions for approval of existing containers set out in Annex I within five years from the date of entry into force of the present Convention.

#### **ARTICLE IV**

#### Testing, inspection, approval and maintenance

- 1. For the enforcement of the provisions of Annex I every Administration shall establish an effective procedure for the testing, inspection and approval of containers in accordance with the criteria established in the present Convention, provided, however, that an Administration may entrust such testing, inspection and approval to organizations duly authorized by it.
- 2. An Administration which entrusts such testing, inspections and approval to an organization **shall** inform the Secretary-General of the Inter-Governmental Maritime Consultative Organization (hereinafter referred to as "the Organization") for communication to Contracting Parties.
- Application for approval may be made to the Administration of any Contracting Party.
- **4.** Every container shall be maintained in **a** safe condition in accordance with **the provisions** of **Annex I**.
- 5. If an approved container does not in fact comply with the requirements of Annexes I and II the Administration concerned shall take such steps as it deems necessary to bring the container into compliance with such requirements or to withdraw the approval.

#### **ARTICLE V**

#### Acceptance of approval

- 1. Approval under the authority of a Contracting Party, granted under the terms of the present Convention, shall be accepted by the other Contracting Parties for all purposes covered by the present Convention. It shall be regarded by the other Contracting Parties as having the same force as an approval issued by them.
- 2. A Contracting Party shall not impose any other structural safety requirements or tests on containers covered by the present Convention, provided, however, that nothing in the present Convention shall preclude the application of provisions of national regulations or legislation or of international agreements, prescribing additional structural safety requirements or tests for containers specially designed for the transport of dangerous goods, or for those features unique to containers carrying bulk liquids or for containers when carried by air. The term "dangerous goods" shall have that meaning assigned to it by international agreements.

### ARTICLE VI

#### Control

- 1. Every container which has been approved under Article III shall be subject to control in the territory of the Contracting Parties by officers duly authorized by such Contracting Parties. This control shall be limited to verifying *that* the container carries a valid Safety Approval Plate as required by the present Convention, unless there is significant evidence for believing that the condition of the container is such as to create an obvious risk to safety. In that case the officer carrying out the control shall only exercise it in so far as it may be necessary to ensure that the container is restored to a safe condition before it continues in service.
- 2. Where the container appears to have become unsafe as a result of a defect which may have existed when the container was approved, the

Administration responsible for that approval shall be informed by the Contracting Party which detected the defect.

#### **ARTICLE VII**

#### Signature, ratification, acceptance, approval and accession

- 1. The present Convention shall be open for signature until 15

  January 1973 at the Office of the United Nations at Geneva and subsequently from 1 February 1973 until 31 December 1973 inclusive at the Headquarters of the Organization at London by all States Members of the United Nations or Members of any of the specialized agencies or of the International Atomic Energy Agency or Parties to the Statute of the International Court of Justice, and by any other State invited by the General Assembly of the United Nations to become a Party to the present Convention.
- 2 The present Convention **is** subject to ratification, acceptance or approval by States which have signed it.
- 3. The present Convention shall remain open for accession by any State referred to in paragraph 1.
- **4.** Instruments of ratification, acceptance, approval or accession shall be deposited with the Secretary-General the Organization (hereinafter referred to **as "the** Secretary-General").

#### **ARTICLE VIII**

#### Entry into force

- 1. The present Convention shall enter into force twelve months from the date of the deposit of the tenth instrument of ratification, acceptance, approval or accession.
- 2. For each State ratifying, accepting, approving or acceding to the present Convention after the deposit of the tenth instrument of ratification, acceptance, approval or accession, the present Convention shall enter into

force twelve months after the date of the deposit by such State of its instrument of ratification, acceptance, approval or accession.

- 3. Any State which becomes a Party to the present Convention after the entry into force of an amendment shall, failing an expression of a different intention by that State,
  - (a) be considered as a Party to the Convention as amended; and
  - (b) be considered as a Party to the unamended Convention in relation to any Party to the Convention not bound by the amendment.

#### **ARTICLE IX**

#### Procedure for amending any pant or parts of the present Convention

- 1. The present Convection may be amended upon the proposal of a Contracting Party by any of the procedures specified in this Article.
- 2. Amendment after consideration in the Organization:
  - (a) Upon the request of a Contracting Party, any amendment proposed by it to the present Convention shall be considered in the Organization. If adopted by **a** majority of two thirds of those present and voting in the Maritime Safety Committee of the Organization, to which all Contracting Parties shall have been invited to participate and vote, such amendment shall be communicated to all Members of the Organization and **all** Contracting Parties at least **six** months prior to its consideration by the Assembly of the Organization. Any Contracting Party which is not a Member of the Organization shall be entitled to participate and vote when the amendment is considered by the Assembly.
  - (b) If adopted by a two-thirds majority of those present and voting in the Assembly, and if such majority includes a twothirds majority of the Contracting Parties present and voting,

- the amendment shall be communicated by the Secretary-General to **all** Contracting Parties for their acceptance.
- (c) Such amendment shall come into force twelve months after the date on which it is accepted by two thirds of the Contracting Parties. The amendment shall come into force with respect to all Contracting Parties except those which, before it comes into force, make a declaration that they do not accept the amendment.
- 3. Amendment by a conference:

Upon the request of a Contracting Party, concurred in by at least one third of the Contracting Parties, a conference to which the States referred to in Article VII shall be invited will be convened by the Secretary-General.

#### **ARTICLE X**

#### Special procedure for amending the Annexes

- 1. Any amendment to the Annexes proposed by a Contracting Party shall be considered in the Organization at the request of that Party.
- 2. If adopted by a two-thirds majority of those present and voting in the Maritime Safety Committee of the Organization to which all Contracting Parties shall have been invited to participate and to vote, and if such majority includes a two-thirds majority of the Contracting Parties present and voting, such amendment shall be communicated by the Secretary-General to all Contracting Parties for their acceptance.
- 3. Such an amendment shall enter into force on a date to be determined by the Maritime Safety Committee at the time of its adoption unless, by a prior date determined by the Maritime Safety Committee at the same time, one fifth or five of the Contracting Parties, whichever number is less, notify the Secretary-General of their objection to the amendment. Determination by the Maritime Safety Committee of the dates referred to in this paragraph shall be by a two-thirds majority of those present and voting, which majority shall include a two-thirds majority of the Contracting Parties present and voting.

- 4. On entry into force any amendment shall, for all Contracting Parties which have not objected to the amendment, replace and supersede any previous provision to which the amendment refers; an objection made by a Contracting Party shall not be binding on other Contracting Parties as to acceptance of containers to which the present Convention applies.
- 5. The Secretary-Generalshall inform all Contracting Parties and Members of the Organization of any request and communication under this Article and the date on which any amendment enters into force.
- 6. Where a proposed amendment to the Annexes has been considered but not adopted by the Maritime Safety Committee, any Contracting Party may request the convening of a conference to which the States referred to in Article VII shall be invited. Upon receipt of notification of concurrence by at least one third of the other Contracting Parties, such a conference shall be convened by the Secretary-General to consider amendments to the Annexes.

#### **ARTICLE XI**

#### Denunciation

- 1. Any Contracting Party may denounce the present Convention by effecting the deposit of an instrument with the Secretary-General. The denunciation shall take effect one year from the date of such deposit with the Secretary-General.
- A Contracting Party which has communicated an objection to an amendment to the Annexes may denounce the present Convention and such denunciation shall take effect on the date of entry into force of such an amendment.

#### **ARTICLE XII**

#### **Termination**

The present Convention shall cease to be in force if the number of Contracting Parties is less than five for any period of twelve consecutive months.

#### **ARTICLE XIII**

#### Settlement of disputes

- 1. Any dispute between *two* or more Contracting Parties concerning the interpretation or application of the present Convention which cannot be settled by negotiation or other means of settlement shall, at the request of one of them, be referred to an arbitration tribunal composed as follows: each party to the dispute shall appoint an arbitrator and these two arbitrators shall appoint a third arbitrator, who shall be Chairman. If, three months after receipt of a request, one of the parties has failed to appoint an arbitrator or if the arbitrators have failed to elect the Chairman, any of the parties may request the Secretary-General to appoint an arbitrator or the Chairman of the arbitration tribunal.
- **2.** The decision of the arbitration tribunal established under the provisions of paragraph **1** shall be binding on the parties to the dispute.
- **The** arbitration tribunal shall determine its own rules of procedure.
- **4.** Decisions of the arbitration tribunal, both as to its procedures and its place of meeting and as to any controversy laid before it, shall be taken by majority vote.
- **5.** Any controversy which may arise between the parties to the dispute **as** regards the interpretation and execution of the award may be submitted by any of the parties for judgment to the arbitration tribunal which made the award.

#### **ARTICLE XIV**

#### Reservations

- ■ Reservations to the present Convention shall be permitted, excepting those relating to the provisions of Articles I to VI, XIII, the present Article and the Annexes, on condition that such reservations are communicated in writing and, if communicated before the deposit of the instrument of ratification, acceptance, approval or accession, are confirmed in that instrument. The Secretary-General shall communicate such reservations to all States referred to in Article VII.
- 2. Any reservation made in accordance with paragraph 1:
  - (a) modifies for the Contracting Party which made the reservation the provisions of the present Convention to which the reservation relates to the extent of the reservation; and
  - (b) modifies those provisions to the same extent for the other Contracting Parties in their relations with the Contracting Party which entered the reservation.
- 3. Any Contracting Party which has formulated a reservation under paragraph 1 may withdraw it at any time by notification to the Secretary-General.

#### **ARTICLE XV**

#### **Notification**

In addition to the notifications and communications provided for in Articles IX, X and XIV, the Secretary-General shall notify all the States referred to in Article **VII** of the following:

- (a) signatures, ratifications, acceptances, approvals and accessions under Article VII;
- (b) the dates of entry into force of the present Convention in accordance with Article VIII;

- the date of entry into force of amendments to the present Convention in accordance with Articles IX and X;
- (d) denunciations under Article XI;
- (e) the termination of the present Convention under Article XII.

### ARTICLE XVI Authentic texts

The original of the present Convention, of which the Chinese, English, French, Russian and Spanish texts are equally authentic, **shall** be deposited with the Secretary-General, who shall communicate certified true copies to all States referred to in Article VII.

INWITNESS WHEREOF the undersigned' Plenipotentiaries, being duly authorized thereto by their respective Governments, have signed the present Convention.

DONE at Geneva this second day of December, one thousand nine hundred and seventy-two.

22

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<sup>\*</sup> Signatures omitted.

#### ANNEX I

### REGULATIONS FOR THE TESTING, INSPECTION, APPROVAL AND MAINTENANCE OF CONTAINERS

### CHAPTER I REGULATIONS COMMON TO ALL SYSTEMS OF APPROVAL

#### **REGULATION 1**

#### Safety Approval Plate

- 1. (a) A Safety Approval Plate conforming to the specifications set out in the Appendix to this Annex shall be permanently affixed to every approved container at a readily visible place, adjacent to any other approval plate issued for official purposes, where it would not be easily damaged.
  - (6) On each container, all maximum gross weight markings shall be consistent with the maximum gross weight information on the Safety Approval Plate.
  - (c) The owner of the container shall remove the Safety Approval Plate on the container if:
    - the container has been modified in a manner which would void the original approval and the information found on the Safety Approval Plate, or
    - the container is removed from service and is not being maintained in accordance with the Convention, or
    - (iii) the approval has been withdrawn by the Administration.
- 2. (a) The plate shall contain the following information in at least the English or French language:

#### "CSC SAFETY APPROVAL"

Country **of** approval and approval reference Date (month and year) of manufacture

Manufacturer's identification number of the container or, in the case of existing containers for which that number is unknown, the number allotted by the Administration

Maximum operating gross weight (kg and lb)

Maximum operating gross weight (kg and lb)
Allowable stacking weight for 1,8 g (kg and lb)
Transverse racking test load value (kg and lb).

- (b) A blank space should be reserved on the plate for insertion of end-wall and/or side-wall strength values (factors) in accordance with paragraph 3 of this Regulation and Annex II, tests 6 and 7. A blank space should also be reserved on the plate for the first and subsequent maintenance examination dates (month and year) when used.
- 3. Where the Administration considers that a new container satisfies the requirements of the present Convention in respect of safety and if, for such container, the end-wall and/or side-wall strength values (factors) are designed to be greater or less than those stipulated in Annex II, such values shall be indicated on the Safety Approval Plate.
- 4. The presence of the Safety Approval Plate does not remove the necessity of displaying such labels or other information as may be required by other regulations which may be in force.

#### **REGULATION 2**

#### Maintenance and examination

- 1. The owner of the container shall be responsible for maintaining it in safe condition.
- 2. (a) The owner of an approved container shall examine the container or have it examined in accordance with the procedure either prescribed or approved by the Contracting Party concerned, at intervals appropriate to operating conditions.

- (b) The date (month and year) before which a new container shall undergo its first examination shall be marked on the Safety Approval Plate.
- (c) The date (month and year) before which the container shall be re-examined shall be clearly marked on the container on or as close as practicable to the Safety Approval Plate and in a manner acceptable to that Contracting Party which prescribed or approved the particular examination procedure involved.
- (d) The interval from the date of manufacture to the date of the first examination shall not exceed five years. Subsequent examination of new containers and re-examination of existing containers shall be at intervals of not more than 30 months. All examinations shall determine whether the container has any defects which could place any person in danger.
- 3. (a) As an alternative to paragraph 2, the Contracting Party concerned may approve a continuous examination programme if satisfied, on evidence submitted by the owner, that such a programme provides a standard of safety not inferior to the one set out in paragraph 2 above.
  - (b) To indicate that the container is operated under an approved continuous examination programme, a mark showing the letters "ACEP" and the identification of the Contracting Party which has granted approval of the programme shall be displayed on the container on or as close as practicable to the Safety Approval Plate,
  - (c) All examinations performed under such a programme shall determine whether a container has any defects which could place any person in danger. They shall be performed in connection with a major repair, refurbishment, or on-h/re/offhire interchange and in no case less than once every 30 months.

4. For the purpose of this Regulation "the Contracting Party concerned" is the Contracting Party of the territory in which the owner is domiciled or has his head office. However, in the event that the owner is domiciled or has his head office in a country the government of which has not yet made arrangements for prescribing or approving an examination scheme and until such time as the arrangements have been made, the owner may use the procedure prescribed or approved by the Administration of a Contracting Party which is prepared to act as the Contracting Party concerned. The owner shall comply with the conditions for the use of such procedures set by the Administration in question.

## CHAPTER II REGULATIONS FOR APPROVAL OF NEW CONTAINERS BY DESIGN TYPE

### REGULATION3 Approval of new containers

**To** qualify for approval for safety purposes under the present Convention **all** new containers shall comply with the requirements set out in Annex II.

### REGULATION4 Design type approval

In the case of containers for which an application for approval has been submitted, the Administration will examine designs and witness testing of a prototype container to ensure that the containers will conform with the requirements set out in Annex II. When satisfied, the Administration shall notify the applicant in writing that the container meets the requirements of the present Convention and this notification shall entitle the manufacturer to affix the Safety Approval Plate to every container of the design type series.

#### **REGULATION 5**

#### Provisions for approval by design type

- 1. Where the containers are to be manufactured by design type series, application made to an Administration for approval by design type shall be accompanied by drawings, a design specification of the type of container to be approved and such other data as may be required by the Administration.
- 2. The applicant shall state the identification symbols which will be assigned by the manufacturer to the type of container to which the application for approval relates.
- **3.** The application shall **also** be accompanied by an assurance from the manufacturer that he will:
  - (a) produce to the Administration such containers of the design type concerned as the Administration may wish to examine;
  - (b) advise the Administration of any change in the design or specification and await its approval before affixing the Safety Approval Plate to the container;
  - (c) affix the Safety Approval Plate to each container in the design type series and to no others;
  - (d) keep a record of containers manufactured to the approved design type. This record shall at least contain the manufacturer's identification numbers, dates of delivery and names and addresses of customers to whom the containers are delivered.
- 4. Approval may be granted by the Administration to containers manufactured as modifications of an approved design type if the Administration is satisfied that the modifications do not affect the validity of tests conducted in the course of design type approval.
- 5. The Administration shall not confer on a manufacturer authority to affix Safety Approval Plates on the basis of design type approval unless satisfied that the manufacturer has instituted internal production-control

features to ensure that the containers produced will conform to the approved prototype.

#### **REGULATION 6**

#### **Examination during production**

In order to ensure that containers of the same design type series are manufactured to the approved design, the Administration shall examine or test as many units as it considers necessary, at any stage during production of the design type series concerned.

#### **REGULATION7**

#### **Notification of Administration**

The manufacturershall notify the Administration prior to commencement of production **of** each new series of containers to be manufactured in accordance with an approved design type.

## CHAPTER III REGULATIONS FOR APPROVAL OF NEW CONTAINERS BY INDIVIDUAL APPROVAL

#### **REGULATION8**

#### Approval of individual containers

Approval of individual containers may be granted where the Administration, after examination and witnessing of tests, **is** satisfied that the container meets the requirements of the present Convention; the Administration, when **so** satisfied, shall notify the applicant in writing of approval and this notification shall entitle him to affix the Safety Approval Plate to such container.

#### **CHAPTER IV**

### REGULATIONS FOR APPROVAL OF EXISTING CONTAINERS AND NEW CONTAINERS NOT APPROVED AT TIME OF MANUFACTURE

#### **REGULATION 9**

#### Approval of existing containers

- 1. If, within five years from the date of entry into force of the present Convention, the owner of an existing container presents the following information an Administration:
  - (a) date and place of manufacture;
  - (b) manufacturer's identification number of the container, if available;
  - (c) maximum operating gross weight capability;
  - (d) (i) evidence that a container of this type has been safely operated in maritime and/or inland transport for a period of at least two years, or
    - (ii) evidence to the satisfaction of the Administration that the container was manufactured to a design **type** which had been tested and found to comply with the technical conditions set out in Annex II, with the exception of those technical conditions relating to the end-wall and side-wall strength tests, or
    - evidence that the container was constructed to standards which, in the opinion of the Administration, were equivalent to the technical conditions set at in Annex II, with the exception of those technical conditions relating to the end-wall and side-wall strength tests;
  - (e) allowable stacking weight for 1,8 g (kg and lb); and
- such other data as required for the Safety Approval Plate; then the Administration, after investigation, shall notify the owner in writing whether approval is granted; and if so, this notification shall entitle the

owner to affix the Safety Approval Plate after an examination of the container concerned has been carried out in accordance with Regulation 2. The examination of the container concerned and the affixing of the Safety Approval Plate shall be accomplished not later than 1 January 1985.

2. Existing containers which do not qualify for approval under paragraph 1 of this Regulation may be presented for approval under the provisions of Chapter II or Chapter III of this Annex. For such containers the requirements of Annex II relating to end-wall and/or side-wall strength tests shall not apply. The Administration may, if it is satisfied that the containers in question have been in service, waive such of the requirements in respect of presentation of drawings and testing, other than the lifting and floor-strength tests, as it may deem appropriate.

#### **REGULATION 10**

#### Approval & new containers not approved at time of manufacture

**If,** on or before 6 September 1982, the owner of a new container which was not approved at the time of manufacture presents the following information to an Administration:

- (a) date and place of manufacture;
- (b) manufacturer's identification number of the container, if available;
- (c) maximum operating gross weight capability;
- (d) evidence to the satisfaction of the Administration that the container was manufactured to a design type which has been tested and found to comply with the technical conditions set out in Annex II;
- (e) allowable stacking weight for 1,8 g (kg and lb); and
- (f) such other data as required for the Safety Approval Plate; the Administration, after investigation, may approve the container, notwithstanding the provisions of Chapter II. Where approval is granted, such approval shall be notified to the owner in writing, and this notification shall entitle the owner to affix the Safety Approval Plate after an

examination of the container concerned has been carried out in accordance with Regulation 2. The examination of the container concerned and the affixing of the Safety Approval Plate shall be accomplished not later than 1 January 1985.

## CHAPTER V REGULATIONS FOR APPROVAL OF MODIFIED CONTAINERS

### REGULATION11 Approval of modified containers

The owner of an approved container that has been modified **in** a manner resulting in structural changes shall notify the Administration or an approved organization duly authorized by it of those changes. **The** Administration or authorized organization may require retesting of the modified container as appropriate prior to recertification.

#### **APPENDIX**

The Safety Approval Plate, conforming to the **model** reproduced below, shall take the form of a permanent, non-corrosive, fireproof rectangular plate measuring not less than 200 mm x 100 mm. The words "CSC SAFETY APPROVAL", of a minimum letter height of 8 mm, and all other words and **numbers** of a minimum height of 5 mm shall be stamped into, embossed on or indicated on the surface of the plate in any other permanent and legible way.

	CSC SAFETY APPROVAL			
1	[GB-L/749/2/7/75]			
2	DATE MANUFACTURED			
3	IDENTIFICATION No			
4	MAXIMUM GROSS WEIGHT	kg	lb	≥ 100 m m→
5	ALLOWABLE STACKING WEIGHT			8
6	FOR 1,8 g kg	lb		\ \ \
7	RACKING TEST LOAD			*
	VALUE	kg	lb	
8				
9				
	← ≥ 200 mm →			

- Country of approval and approval reference as given in the example on line 1. (The country of approval should be indicated by means of the distinguishing sign used to indicate country of registration of motor vehicles in international road traffic.)
- **2.** Date (month and year) of manufacture.

- 3. Manufacturer's identification number of the container or, in the case of existing containers for which that number is unknown, the number allotted by the Administration.
- **4.** Maximum operating gross weight (kg and lb).
- **5.** Allowable stacking weight for 1,8 g (kg and lb).
- **6.** Transverse racking test load value (kg and lb).
- 7. End-wall strength to be indicated on plate only if end-walls are designed to withstand a load of less or greater than 0,4 times the maximum permissible payload, i.e. 0,4 P.
- 8. Side-wall strength to be indicated on plate only if the side-walls are designed to withstand a load of **less** or greater than 0,6 times the maximum permissible payload, i.e. 0,6 P.
- 9. First maintenance examination date (month and year) for new containers and subsequent maintenance examination dates (month and year) if plate is used for this purpose.

### ANNEX II STRUCTURAL SAFETY REQUIREMENTS AND TESTS

#### Introduction

In setting the requirements of this Annex, it is implicit that in all phases of the operation of containers the forces as a result of motion, location, stacking and weight of the loaded container and external forces will not exceed the design strength of the container. In particular, the following assumptions have been made:

- (a) the container will so be restrained that it is not subjected to forces in excess of those for which it has been designed;
- (b) the container will have its cargo stowed in accordance with the recommended practices of the trade so that the cargo does not impose upon the container forces in excess of those for which it has been designed.

#### Construction

- 1. A container made from any suitable material which satisfactorily performs the following tests without sustaining any permanent deformation or abnormality which would render it incapable of being used for its designed purpose shall be considered safe.
- 2. The dimensions, positioning and associated tolerances of corner fittings shall be checked having regard to the lifting and securing systems in which they will function.

#### Test loads and test procedures

Where appropriate to the design of the container, the following test loads and test procedures shall be applied to all kinds of containers under test:

#### 1. LIFTING

The container, having the prescribed internal loading, shall be lifted in such a way that no significant acceleration forces are applied. After lifting, the container shall be suspended or supported for five minutes and then lowered to the ground.

#### (A) Lifting from corner fittings

(i)

### TEST LOADINGS AND APPLIED FORCES

#### **Internal loading:**

A uniformly distributed load such that the combined weight of container and test load is equal to 2 R. In the case of a tank-container, when the test weight of the internal load plus the tare weight is less than 2 R, a supplementary load distributed over the length of the tank is to be applied to the container.

#### **Externally applied forces:**

Such as to lift the combined weight of 2 R in the manner prescribed (under the heading TEST PROCEDURES).

#### Lifting from top comer fittings:

**TEST PROCEDURES** 

Containers greater than 3 000 mm (10 ft) (nominal) in length shall have lifting forces applied vertically at all four top corner fittings.

Containers of 3 000 mm (10 ft) (nominal) in length or less shall have lifting forces applied at all four top comer fittings, in such a way that the angle between each lifting device and the vertical shall be 30'.

#### (ii) Lifting from bottom cornet fittings:

Containers shall have lifting forces applied in such a mannerthat the lifting devices bear on the bottom corner fittings only. The lifting forces shall be applied at angles to the horizontal of:

30' for containers of length 12 000 mm (40 ft) (nominal) or greater,

37' for containers of length
9 000 mm (30 ft) (nominal) and up
to but not including 12 000 mm
(40 ft) (nominal),
45' for containers of length
6 000 mm (20 ft) (nominal) and up
to but not including 9 000 mm
(30 ft) (nominal),
60' for containers of less than
6 000 mm (20 ft) (nominal).

## (B) Lifting by any other additional methods

# TEST LOADINGS AND APPLIED FORCES

## Internal loading:

A uniformly distributed load such that the combined weight of container and test load is equal to 1,25 R. In the case of a tank-container, when the test weight of the internal load plus the tare weight is less than 1,25 R, a supplementary load distributed over the length of the tank is to be applied to the container.

Externally applied **forces:**Such as to lift the combined weight of 1,25 R in the manner prescribed (under the heading TEST PROCEDURES).

# **TEST PROCEDURES**

(i) Lifting from fork-lift pockets:

The container shall be placed on bars which are in the same horizontal plane, one bar centred within each fork-lift pocket which is used for lifting the loaded container. The bars shall be of the same width as the forks intended to be used in the handling, and shall project into the fork pocket 75% of the length of the fork pocket.

(ii) Lifting from grappler arm positions:

The container shall be placed on pads in the same horizontal plane, one under each grappler arm position. These pads shall be of the same sizes as the tifting area of the grappler arms intended to be used.

### (iii) Other methods:

Where containers are designed to be lifted in the loaded condition by any method not mentioned in (A) or (B)(i) and (ii)they shall also be tested with the internal loading and externally applied forces representative of the acceleration conditions appropriate to that method.

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### 2. STACKING

- 1. For conditions of international transport where the maximum vertical acceleration forces vary significantly from 1,8 g and when the container is reliably and effectively limited to such conditions of transport, the stacking load may be varied by the appropriate ratio of acceleration forces.
- 2. On successful completion of this test the container may be rated for the allowable superimposed static stacking weight, which should be indicated on the Safety Approval Plate against the heading ALLOWABLE STACKING WEIGHT FOR 1,8 g (kg and lb).

# TEST LOADINGS AND APPLIED FORCES

### **TEST PROCEDURES**

## Internal loading:

A uniformly distributed load such that the combined weight of container and test load is equal to 1,8 R. Tank-containers may be tested in the tare condition.

The container, having the prescribed internal loading, shall be placed on four level pads which are in turn supported on a rigid horizontal surface, one under each bottom comer fitting or equivalent comer structure. The pads shall be centralized under the fittings and shall be of approximately the same pian dimensions as the fittings.

## **Externally applied forces:**

Such as to subject each of the four top comer fittings to a vertical downward force equal to 0,25 x 1,8 x the allowable superimposed static stacking weight.

Each externally applied force shall be applied to each of the comer fittings through a corresponding test corner fitting or through a pad of the same plan dimensions. The test comer fitting or pad shall be offset with respect to the top comer fitting of the container by 25 mm (1 in) laterally and 38 mm (1½ in) longitudinally.

### Draft Merchant Shiooina Safe Containers Convention)Bill and Regulations: For comment

## 3. CONCENTRATED LOADS

# TEST LOADINGS AND APPLIED FORCES

### **TEST PROCEDURES**

# (a) On roof

# Internal loading:

None.

# **Externally applied forces:**

A concentrated load of 300 kg (660 lb) uniformly distributed over an area of 600 mm x 300 mm (24 in x 12 in).

The externally applied forces shall be applied vertically downwards to the outer surface of the weakest area of the roof of the container.

## (b) On floor

## Internal loading:

Two concentrated loads, each of 2 730 kg (6 000 lb) and each applied to the container floor through a contact area of 142 cm<sup>2</sup> (22 sq in).

The test should be made with the container resting on four level supports under its four bottom corners in such a manner that the base structure of the container is free to deflect.

A testing device loaded to a weight of 5 460 kg (12 000 lb), that is 2 730 kg (6 000 lb) on each of two surfaces, having, when loaded, a total contact area of 284 cm² (44 sq in), that is 142 cm² (22 sq in) on each surface, the surface width being 180 mm (7 in) spaced 760 mm (30 in) apart, centre to centre, should be manoeuvred over the entire floor area of the container.

# **Externally applied forces:**

None.

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### 4. TRANSVERSE RACKING

TEST LOADINGS AND APPLIED FORCES

TEST PROCEDURES

# Internal loading:

None.

The container in tare condition shall be placed on four level supports, one under each bottom corner, and shall be restrained against lateral and vertical movement by means of anchor devices so arranged that the lateral restraint is provided only at the bottom comers diagonally opposite to those at which the forces are applied.

# Externally applied forces:

Such as to rack the end structures of the container sideways. The forces shall be equal to those for which the container was designed.

The externally applied forces shall be applied either separately or simultaneously to each of the top corner fittings on one side of the container in tines parallel both to the base and to the planes of the ends of the container. The forces shall be applied first towards and then away from the top corner fittings. In the case of containers in which each end is symmetrical about its own vertical centerline, one side only need be tested, but both sides of containers with asymmetric ends shall be tested.

# 5. LONGITUDINAL RESTRAINT (STATIC TEST)

When designing and constructing containers, it must be borne in mind that containers, when carried by inland modes of transport, may sustain accelerations of 2 g applied horizontally in a longitudinal direction.

# TEST LOADINGS AND APPLIED FORCES

# **TEST PROCEDURES**

# Internal loading:

A uniformly distributed load, such that the combined weight of a container and test load is equal to the maximum operating gross weight or rating, R. In the case of a tank-container, when the weight of the internal load plus the tare is less than the maximum gross weight or rating, R, a supplementary load is to be applied to the container.

The container, having the prescribed internal loading, shall be restrained longitudinally by securing the two bottom comer fittings or equivalent comer structures at one end to suitable anchor points.

# Externally applied forces:

Such as to subject each side of the container to longitudinal compressive and tensile forces of magnitude R, that is, a combined force of 2 R on the base of the container as a whole. The externally applied forces shall be applied first towards and then away from the anchor points. Each side of the container shall be tested.

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# 6. END-WALLS

The end-walls should be capable of withstanding a load of not less than 0,4 times the maximum permissible payload. If, however, the end-walls are designed to withstand a load of less or greater than 0,4 times the maximum permissible payload, such a strength factor shall be indicated on the Safety Approval- Plate in accordance with Annex I, Reaulation 1.

TEST LOADINGS AND APPLIED

**TEST PROCEDURES** 

## **FORCES**

# **Internal** loading:

Such as to subject the inside of an end-wall to a uniformly distributed load of 0,4 P or such other load for which the container may be designed.

The prescribed internal loading shall be applied as follows:

Both ends of a container shall be tested except that where the ends are identical only one end need be tested. The endwalls of containers which do not have open sides or side doors may be tested separately or simultaneously.

The end-walls of containers which do have open sides or side doors should be tested separately. When the ends are tested separately the reactions to the forces applied to the end-wail shall be confined to the base structure of the container.

# **Externally applied forces:**

None.

Draft Merchant p (Safe to vention) Bill and Regulations: For comment

### 7. SIDE-WALLS

The side-walls should be capable of withstanding a load of not less than 0,6 times the maximum permissible payload. If, however, the side-walls are designed to withstand a load of less or greater than 0,6 times the maximum permissible payload, such a strength factor shall be indicated on the Safety Approval Plate in accordance with Annex I, Regulation 1.

# TEST LOADINGS AND APPLIED FORCES

## **TEST PROCEDURES**

## Internal loading:

Such as to subject the inside of a side-wall to a uniformly distributed load of 0,6 P or such other load for which the container may be designed.

The prescribed internal loading shall be applied as follows:

Both sides of a container shall be tested except that where the sides are identical only one side need be tested. Side-walls shall be tested separately and the reactions to the internal loading shall be confined to the corner fittings or equivalent comer structures. Open-topped containers shall be tested in the condition in which they are designed to be operated, for example, with removable top members in position.

# **Externally applied forces:**

None.

# PART 2

# 1993 AMENDMENTS.

- 1. Paragraphs 14 to 16 of Article II (Definitions) are amended to read:
  - "14. 'Maximum Operating Gross Mass' or 'Rating' or 'R' means the maximum allowable sum of the mass of the container and its cargo. The letter 'R' is expressed in units of mass. Where the Annexes are based on gravitational forces derived from this value, that force, which is an inertial force, is indicated as 'Rg'.
  - **15.** 'Tare' means the mass of the empty container, including permanently affixed ancillary equipment.
  - 16. 'Maximum Permissible Payload' or 'P' means the difference between maximum operating gross mass or rating and tare. The letter 'P' is expressed in units of mass. Where the Annexes are based on the gravitational forces derived from this value, that force, which is an inertial force, is indicated as 'Pg'.".

New paragraphs 17 to 19 are added as follows:

- **"17.** The word 'load', when used to describe a physical quantity to which units may be ascribed, signifies mass.
- **18.** The word 'loading', for example, as in 'internal loading', signifies force.
- 19. The fetter 'g' means the standard acceleration of gravity, 'g' equals 9,8 m/s².".
- 2. Annex I, subparagraph 1(b) of Regulation 1 is amended to read:
  - "(b) On each container all maximum gross mass markings shall be consistent with the maximum gross mass information on the Safety Approval Plate.".

Subparagraph2(a) is amended to read:

<sup>\*</sup> Adopted by IMO resolution A.737(18) on 4 November 1993.

"(a) The plate shall contain the following information in at least the English or French language:

"CSC SAFETY APPROVAL
Country of approval and approval reference
Date (month and year) of manufacture
Manufacturer's identification number of the
container or, in the case of existing
containers for which that number is unknown,
the number allotted by the Administration
Maximum operating gross mass (kg and lbs)
Allowable stacking load for 1,8 g (kg and Ibs)
Transverse racking test force (Newtons)."

A new paragraph 5 is added as follows:

- **"5.** A container, the construction of which was completed prior to the date of commencement of this paragraph, may retain the Safety Approval Plate as permitted by the Convention prior to that date as long as no structural modifications occur to that container.".
- 3. Annex I, subparagraphs 1(c) and 1(e) of Regulation 9 are amended to read:
  - "(c) maximum operating gross mass capability;".
  - "(e) allowable stacking load for 1,8 g (kg and Ibs); and".
- **4.** Annex I, subparagraphs (c) and (e) of Regulation 10 are amended to read:
  - "(c) maximum operating gross mass capability;".
  - "(e) allowable stacking load for 1,8 g (kg and lbs); and".
- Annex I, the fourth, fifth and sixth lines of the model of the Safety Approval Plate reproduced in the Appendix are amended to read:

  "MAXIMUM OPERATING GROSS MASS....kg....ibs

  ALLOWABLE STACKING LOAD FOR 1,8 g...kg,...ibs

  TRANSVERSE RACKING TEST FORCE....Newtons".
- 6. Annex I, items 4 to 8 of the Appendix are amended to read:
  - "4. Maximum operating gross mass (kg and Ibs).

### Ly Iff M C131 Shipping (Safe Containers Convention) Bill and Regulations: F comment

- **5.** Allowable stacking load for 1,8 g (kg and lbs).
- **6.** Transverse racking test force (Newtons).
- 7. End-wall strength to be indicated on plate only if end-walls are designed to withstand a force of less or greater than 0,4 times the gravitational force by maximum permissible payload, i.e. 0,4 Pg.
- 8. Side-wall strength to be indicated on plate only if the side-walls are designed to withstand a force of less or greater than 0,6 times the gravitational force by maximum permissible payload, i.e. 0,6 Pg.".
- 7. The first sentence of the Introduction to Annex II (Structural safety requirements and tests) is amended to read:

"In setting the requirements of this Annex, it is implicit that, in all phases of the operation of containers, the forces as a result of motion, location, stacking and gravitational effect of the loaded container and external forces will not exceed the design strength of the container."

8. Annex II, section 1(A) – Lifting from corner fittings – the text concerning test loadings and applied forces is amended to read:

"TEST LOAD AND APPLIED FORCES

## **Internal load:**

A uniformly distributed load such that the sum of the mass of container and test load is equal to 2 R. In the case of a tank-container, when the test load of the internal load plus the tare is less than 2 R, a supplementary load, distributed over the length of the tank, is to be added to the container.

# **Externally applied forces:**

Such **as** to lift the sum of a mass of 2 R in the manner prescribed (under the heading TEST PROCEDURES).".

9. Annex II, section 1(B) - Lifting by any other additional methods - is amended to read:

# "TEST **LOAD** AND **APPLIED** FORCES

Internal load:

A uniformly distributed load such that the sum of the mass of container and test load is equal to 1,25 R.

Externally applied forces:
Such as to lift the sum of a mass of 1,25 R in the manner prescribed (under the heading TEST **PROCEDURES**).

# Internal load:

A uniformly distributed load such that the sum of the mass of container and test load is equal to 1,25 R. In the case of a tank-container, when the test load of the internal load plus the tare is less than 1,25 R, a supplementary load, distributed over the length of the tank, is to be added to the container.

Externally applied forces: Such as to lift the sum of a mass of 1,25 R in the manner prescribed (under the heading TEST **PROCEDURES**).

## **TEST PROCEDURES**

# (i) Lifting from fork-lift pockets:

on bars which are in the same horizontal plane, one bar being centred within each fork-lift pocket which is used for lifting the loaded container. The bars shall be of the same width as the forks intended to be used in the handling, and shall project into the fork pocket 75% of the length of the fork pocket.

# (ii) Lifting fmm grappler ann positions:

The container shall be ptaced on pads in the same horizontal plane, one under each grappler arm position. These pads shall be of the same sizes as the lifting area of the grappler arms intended to **be** used.

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# (iii) Other methods:

Where containers are designed to be lifted in the loaded condition by any method not mentioned in (A) or (B)(i) and (ii)they shall also be tested with the internal load and externally applied forces representative of the acceleration conditions appropriate to that method."

- **10.** Annex II, paragraphs 1 and 2 of section 2 STACKING are amended to read:
  - **"1.** For conditions of international transport where the maximum vertical acceleration varies significantly from 1,8 g and when the container is reliably and effectively limited to such conditions of transport, the stacking load may be varied by the appropriate ratio of acceleration.
  - 2. On successful completion of this test, the container may be rated for the allowable superimposed static stacking load, which should be indicated on the Safety Approval Plate against the heading ALLOWABLE STACKING LOAD FOR 1,8 g (kg and lbs).".
- 11. Annex II, section 2 STACKING the text concerning test loadings and applied forces is amended to read:

"TEST LOAD AND APPLIED FORCES

# Internal load:

A uniformly distributed load such that the sum of the mass of container and test load is equal to 1,8 R. Tank-containers may be tested in the tare condition.

# Externally applied forces:

Such **as** to subject each of the four top corner fittings to a vertical downward force equal to 0,25 x 1,8 x the gravitational force of the allowable superimposed static stacking load."

*7*5

### 12. Annex 2, section 3 - CONCENTRATED LOADS - is amended to read:

"TEST LOAD AND APPLIED **FORCES** 

**TEST PROCEDURES** 

# (a) On roof

# Internal load:

None.

# **Externally applied forces:**

A concentrated gravitational force of 300 kg (660 lbs) uniformly distributed over an area of 600 mm x 300 mm (24 in x 12 in). The externally applied forces shall be applied vertically downwards to the outer surface of the weakest area of the roof of the container.

# (b) On floor

### Internal load:

Two concentrated loads each of 2 730 kg (6 000 lbs) and each added to the container floor within a contact area of 142 cm² (22 sq in).

The test should be made with the container resting on four level supports under its four bottom comers in such a manner that the base structure of the container is free to deflect.

A testing device loaded to a mass of 5 460 kg (12 000 lbs) [that is, 2 730 kg (6 000 Ibs) on each of two surfaces] having, when loaded, a total contact area of 284 cm2 (44 sq in) [that is, 142 cm² (22sq in) on each surface], the surface width being 180 mm (7 in) spaced 760 mm (30 in) apart, centre to centre, should be manoeuvred over the entire floor area of the container.

# **Externally applied forces:**

None.".

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- 13. Annex II, the heading and subheading of section 4 = TRANSVERSE RACKING = are amended to read respectively: "TEST LOAD AND APPLIED FORCES" and "Internal load:".
- 14. Annex II, section 5 LONGITUDINAL RESTRAINT (STATIC TEST) – the text concerning test loadings and applied forces is amended to read:

"TEST LOAD AND APPLIED FORCES

### Internal load:

A uniformly distributed load, such that the sum of the mass of a container and test load is equal to the maximum operating gross mass or rating R. In the case of a tank-container, when the mass of the internal load plus the tare is less than the maximum gross mass or rating, R, a supplementary load is to be added to the container.

# **Externally applied forces:**

Such as to subject each side **of** the container to longitudinal compressive and tensile forces of magnitude Rg, that is, a combined force of 2 Rg on the base of the container as a whole."

**15.** Annex II, the first paragraph of section **6** – END-WALLS – **is** amended to read:

"The end-walls should be capable of withstanding a force of not less than 0,4 times the force equal to gravitational force **by** maximum permissible payload. If, however, the end-walls are designed **to** withstand a force of less or greater than 0,4 times the gravitational force by maximum permissible payload, such **a** strength factor shall be indicated on the Safety Approval Plate in accordance with Annex **I**, Regulation 1.".

**16.** Annex II, section 6 – END-WALLS – the text concerning test loadings and applied forces is amended to read:

### "TEST LOAD AND APPLIED FORCES

### Internal load:

Such as to subject the inside of **an** end-wall to a uniformly distributed force of 0,4 **Pg** or such other force for which the container may be designed.

# **Externally applied forces:**

None.".

17. Annex II, the first paragraph of section 7 - SIDE-WALLS - is amended to read:

"The side walls should be capable of withstanding a force of not less than 0,6 times the force equal to the gravitational force by maximum permissible payload. If, however, the side-walls are designed to withstand a force of **less or** greater than 0,6 times the gravitational force by maximum permissible payload, such a strength factor shall be indicated on the Safety Approval Plate in accordance with Annex I, Regulation 1.".

**18.** Annex II, section 7 – SIDE-WALLS – the text concerning test loadings and applied forces is amended to read:

"TEST LOAD AND APPLIED FORCES

### Internal load:

Such as to subject the inside of a side-wall to a uniformly distributed force of 0,6 Pg or such other force for which **the** container may be designed.

# **Externally applied forces:**

None.".

# MEMORANDUM ON THE OBJECTS OF THE MERCHANT SHIPPING (SAFE CONTAINERS CONVENTION) BILL

# 1 Purpose

- 1.1 This Bill gives effect to the International Convention for Safe Containers, 1972 ("the Convention"), particularly South Africa's general obligation under Article I.
- 1.2 The Bill also repeats and replaces an earlier attempt to implement the Convention, in the form of the International Convention for Safe Containers Act, 1985 (Act No. 11 of 3985). This Act has never been put into operation.

# 2 Complying with international obligations

South Africa has been a Contracting Party to the Convention since its accession in June 1982. However, failure to implement the 1985 Act has resulted in South Africa not meeting its obligations as a Contracting Party, in particular the obligation under Article 1 of the Convention. The Bill seeks to rectify this by introducing revised and updated implementing measures.

## 3 The Convention and its amendments

- 3.1 The Convention was adopted on 2 December 1972 and entered into force on 6 September 1977. There are currently 65 Contracting Parties.
- 3.2 The Convention has two principal objectives: one is to maintain a high level of safety of human life in the transport and handling of containers by providing generally acceptable test procedures and related strength requirements which have proven adequate over the years; the other is to facilitate international transport of containers by providing uniform international safety regulations, equally applicable to all modes of surface transport. In this way, proliferation of divergent national safety regulations can be avoided.
- 3.3 The requirements of the Convention apply to the great majority of freight containers used internationally, except those designed specially for carriage by air. As it was not intended that all containers should be affected, the scope of the Convention is limited to containers of a

prescribed minimum size having corner fittings, i.e. devices allowing handling, securing or stacking.

- 3.4 The Convention sets out procedures for the safety approval by an Administration of a Contracting State or by an organisation acting on its behalf of containers used in international transport. Approved containers are identified by a safety approval plate, which is affixed to the container under the authority of an Administration. The safety approval plate contains relevant technical data about the container to which it is affixed.
- 3.5 The approval, evidenced by the safety approval plate, granted under the authority of one Contracting State should be recognised by other Contracting States. This principle of reciprocal acceptance **d** safety-approved containers is the cornerstone of the Convention, and once approved and plated it is expected that containers will move in international transport with the minimum of safety control formalities.
- **3.6** The subsequent maintenance of a safety-approved container is the responsibility of the owner, who is required to have the container examined periodically.
- 3.7 The technical Annex to the Convention requires that a container undergo various tests, representing a combination of safety requirements of both the inland and maritime modes of transport.
- **3.8** Flexibility is incorporated in the Convention by the provision **d** simplified amendment procedures that facilitate the **adaption** of test procedures to the prevailing requirements of international container traffic.
- 3.9 The 1981 amendments were adopted on 2 April 1981 and entered into force on 1 December 1981. These amendments provide transitional arrangements for plating of containers (which had to be completed by 1 January 1985), and for the marking of the date of the container's next examination by 1 January 1987.
- 3.10 The 1983 amendments were adopted on 13 June 1983 and entered into force on 1 January 1984. These amendments extend the interval between re-examinations to 30 months and permit a choice of container re-examination procedures between the original periodic examination scheme and a new continuous examination programme.

- **3.11** The **1991** amendments were adopted on **17** May **1991** and entered into force on **1** January **1993**. These amendments include the addition of a new Chapter V to Annex I concerning regulations for the approval of modified containers.
- **3.12** The **1993** amendments were adopted on **4** November **1993** and have yet to enter into force. These amendments concern the information contained on the safety approval plate. They also amend certain test loads and testing procedures required by the Convention.

### 4 Overview of Bill

- **4.1** The Bill proposes to re-assign functions related to the implementation and administration of the Convention, from the Minister and Department of Trade and Industry to the Minister of Transport and the South African Maritime Safety Authority. This will ensure that the functions are assigned to the appropriate authorities having responsibility for transport and related safety matters.
- **4.2** The Bill declares certain provisions of the Convention to have the force of law (clause 5) and empowers the Minister of Transport (clause 6) to make regulations for carrying out and giving effect to those provisions. The regulations will, for example, establish requirements for the approval, maintenance, repair, inspection, detention and disposal of containers.
- **4.3** The text of the Convention **is** set out in Part **1** of the Schedule to the Bill and incorporates several amendments to the Convention, adopted in **1081**, **1983** and **1991**, that were not incorporated in the **1985** Act.
- 4.4 Part 2 of the Schedule sets out the text of the amendments adopted in 1993, which have yet to enter into force. It is proposed that Part 2 enter into force only after the 1993 amendments have entered into force internationally, and after their acceptance by South Africa in accordance with Article IX of the Convention.
- 4.5 The administration and enforcement of the proposed measures are entrusted to the South African Maritime Safety Authority, which, in addition to powers conferred by regulation, *is* empowered to designate inspectors (clause 7), and to direct inquiries (clause IO) into certain accidents and incidents.