



**DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MERCHANT SHIPPING SECRETARIAT
MINISTRY OF PORTS AND SHIPPING**

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Notice to all Ship Owners, Ship Operators and Managers, Masters and Officers of Merchant Ships, Agents, Charterers, Freight Forwarders, Shippers, Consignors, Training Providers, Inspectors of Cargoes, Port Authorities, Terminal Operators, Recognized Organizations and others involved in the transport of Solid Bulk Cargoes.

LOADING, STOWAGE, CARRIAGE AND UNLOADING OF SOLID BULK CARGOES

- 1.0 References:**
- (a) International Convention for the Safety of Life at Sea (SOLAS), Consolidated Edition 2014, as amended
 - (b) International Maritime Solid Bulk Cargoes (IMSBC) Code, 2013 Edition, as amended
 - (c) International Maritime Dangerous Goods (IMDG) Code, 2014 Edition, as amended
 - (d) IMO Resolution MSC.393(95), Amendments to the International Maritime Solid Bulk Cargoes Code, adopted 11 June 2015
 - (e) IMO Circular CCC.1/Circ.2, Carriage of Bauxite that May Liquefy, issued 20 October 2015
 - (f) IMO Circular MSC.1/Circ.1453/Rev.1, Guidelines for the Submission of Information and Completion of the Format for the Properties of Cargoes Not Listed in the International Maritime Solid Bulk Cargoes (IMSBC) Code and Their Conditions of Carriage, issued 12 June 2015
 - (g) IMO Circular MSC.1/Circ.1395/Rev.2, Lists of Solid Bulk Cargoes for Which a Fixed Gas Fire Extinguishing System May be Exempted or for Which a Gas Fire Extinguishing System is Ineffective, issued 12 June 2015.

2.0 Purpose:

This Notice implements the International Maritime Solid Bulk Cargoes (IMSBC) Code, as amended and the requirements governing the transport, loading and unloading of solid bulk cargoes.

3.0 Introduction:

The IMSBC Code became mandatory 01 January 2011, and superseded the Code of Safe Practice for Solid Bulk Cargoes, 2004 (BC Code). Its purpose is to facilitate the safe stowage and shipment of solid bulk cargoes by providing information on the dangers associated with their shipment and instructions on the procedures to be adopted when the shipment of these cargoes is contemplated. It amplifies the mandatory provisions governing the carriage of solid bulk cargoes and the carriage of dangerous goods in solid form in bulk contained in the International Convention for the Safety of Life at Sea (SOLAS)/VI, Parts A and B, and SOLAS/VII, Part A-1, as amended. The International Maritime Dangerous Goods (IMDG) Code harmonizes the practices and procedures to be followed in the carriage of dangerous goods by sea and ensures compliance with the mandatory provisions of SOLAS as well as with those of MARPOL Annex III. Requirements for the transport of grain are covered by the International Code for the Safe Carriage of Grain in Bulk (International Grain Code, 1991).

Although the IMSBC Code is mandatory under the provisions of SOLAS, some parts of the IMSBC Code continue to remain recommendatory or informative. These sections are:

- Section 11, Security (except subsection 11.1.1);
- Section 12, Stowage factor conversion tables;
- Section 13, References to related information and recommendations;
- Appendices, other than appendix 1, Individual Schedules of Solid Bulk Cargoes; and
- The sections titled: “DESCRIPTION,” “CHARACTERISTICS (other than “CLASS” and “GROUP”),” “HAZARD”, and “EMERGENCY PROCEDURES” of individual schedules of solid bulk cargoes in appendix 1.

Thus, in the context of the IMSBC Code:

- “shall” means that the relevant provisions are mandatory;
 - “should” means that the relevant provisions are recommendatory; and
 - “may” means that the relevant provisions are optional.
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- Exemptions that may be sought for solid bulk cargoes for which a fixed gas fire extinguishing system is ineffective (paragraph 2.2.4);
 - The loss of several bulk carriers and lives at sea as a result of cargo liquefaction and new safety and cargo declaration information, including the need to potentially determine the flow moisture point (FMP), transportable moisture limit (TML), and actual moisture content (MC) of the cargo to be loaded (paragraph 2.5); and
 - Requirements for cargoes not listed in the IMSBC code and the necessity for the authority of the port of loading to issue a certificate to incorporate such solid bulk cargo into

the IMSBC Code, the format for this application, and guidelines for its submission (paragraph 4.5).

4.0 Definitions

In this document the following expressions have the following meanings respectively, except where the context requires otherwise. :

.1 **“BLU Code”** means the Code of Practice for the Safe Loading and Unloading of Bulk Carriers, as contained in the Annex to IMO Assembly Resolutions.

.2 **“Bulk carrier”** means any of the following ships which is of 500 gross tonnage or more: a ship constructed with a single deck, top-side tanks and hopper-side tanks in cargo spaces and intended primarily to carry dry cargo in bulk; or an ore carrier, where “ore carrier” means a sea-going single deck ship having two longitudinal bulkheads and a double bottom throughout the cargo region and intended for the carriage of ore cargoes in the centre holds only; or a combination carrier means a tanker designed to carry oil or alternatively solid bulk cargo.

.3 **“Dry cargo in bulk”** or **“Solid bulk cargo”** means any material other than liquid or gas, consisting of a combination of particles, granules or any other large pieces of material generally uniform in composition, which is loaded directly into the cargo spaces of a ship without intermediate form of containment. Excluding grain;

.4 **“Grain”** includes wheat, maize (corn), oats, rye, barley, rice, pulses, seeds, and processed forms thereof whose behavior is similar to that of grain in its natural state.

.5 **“Terminal”** means any fixed, floating or mobile facility equipped and used for the loading or unloading of dry cargo in bulk into or from bulk carriers. “Equipped” is considered by the Harbour Master to include those terminals that use portable cranes for loading /unloading.

.6 **“Terminal operator”** means owner of the terminal, or any organization or person to whom the owner has transferred the responsibility for loading or unloading operations conducted at the terminal for a particular bulk carrier.

.7 **“Terminal representative”** means any person appointed by the terminal Operator, who has the overall responsibility for, and authority to, control the preparation, the conduct and the completion of loading or unloading operations conducted by the terminal for a particular bulk carrier.

.8 **“Master”** means the person (except a pilot) who has command or charge of a bulk carrier; and in particular, where a ship’s officer has command over the loading or unloading operations for a bulk carrier, “Master” in this context means that officer.

.9 **“Recognized organization”** means an organization recognized by the Director General of Merchant Shipping in accordance with Merchant Shipping Regulations.

.10 **“Administration of the flag State”** means the competent authorities of the State whose flag the bulk carrier is entitled to fly.

.11 **“Port State control authority”** means the Merchant Shipping Secretariat.

- 12 **“Competent authority”** means Director General of Merchant Shipping.
- .13 **“Required cargo information”** means the cargo information required by I M S B C Code.
- .14 **“Loading or unloading plan”** means the plan referred to in regulation.
- .15 **“Ship/ Shore safety checklist”** means the check list having the format as contained in Appendix 3 of the BLU Code, which is set out in Part 4 of Schedule 5 of this document.
- .16 **“Solid bulk cargo density declaration”** means the information on the density of the cargo to be provided in compliance with IMSBC Code.

5.0 Application

As Per SOLAS Regulation VI/1-2 and in compliance with relevant provisions of the IMSBC Code, this Marine Notice applies to all ships to which SOLAS, as amended, applies, that are loading, stowing, carriage and unloading of solid bulk cargoes in:

- (a) a regulated Sri Lankan flag vessel; and
- (b) a foreign vessel that is:
 - (i) in a Sri Lankan port; or
 - (ii) entering or leaving a Sri Lankan port; or
 - (iii) in the internal waters of Sri Lanka; or
 - (iii) in the territorial sea of Sri Lanka, other than in the course of innocent passage.

The requirements in this document do not apply to ships which are:

- a) **Not** bulk carriers, by definition
- b) Carrying grain or;
- c) Loading or unloading using shipboard equipment only

The Director General of Merchant Shipping and / or Harbour Master considers that examples of exceptional circumstances are when a ship must discharge its cargo in a port that does not normally handle bulk cargoes due to bad weather or when it enters a Port of Refuge for repair.

Where there is any doubt regarding ‘exceptional circumstances’, the Merchant Shipping Secretariat and / or Harbour master office should be contacted and will consider applicability on a case-by-case basis.

PART 1 : PROCEDURE FOR CARRIAGE OF SOLID BULK CARGO

1.0 Requirements:

1.1 IMSBC Code

Ship owners and ship operators to which the IMSBC Code applies shall comply with the IMSBC Code, as amended.

1.2 SOLAS as amended

All ships carrying solid bulk cargoes shall comply, as appropriate, with the fire protection, detection, and extinction requirements incorporated into Chapter II-2 of SOLAS, as amended.

Ship owners, ship operators, companies, and charterers involved in the transport of solid bulk cargoes shall:

- .1 obtain current valid information on the physical and chemical properties of the cargo (see IMSBC Code Section 4) from the shipper;
- .2 consult the IMSBC Code when transporting any solid bulk cargo;
- .3 provide the Master with all relevant information on the cargo to be loaded in accordance with Chapters VI (Carriage of Cargoes) and VII (Carriage of Dangerous Goods) of SOLAS, as amended, and the provisions of the IMSBC Code (and the IMDG Code, if applicable); and
- .4 inform the Administrator when seeking exemption for carrying solid bulk cargoes for which a fixed gas, fire-extinguishing system may be exempted or for which such a system is ineffective, in accordance with the guidance in MSC.1/Circ.1395/Rev.2.
 - .1 It is within the Administrator's right to grant exemption for cargoes not included in table 1 or to impose conditions when granting such exemptions under the provisions of SOLAS Regulation II-2/10.7.1.4.

1.3 Shippers and shipmasters are required:

- .1 to ensure, by physical inspection by the Master, ship owner representative, or independent cargo surveyor, before loading, the suitability of the hold and its equipment for the transport of the product;
- .2 to ensure, by physical inspection by the Master, ship owner representative, or independent cargo surveyor as deemed necessary, before loading, the suitability of the product for transportation;
- .3 to seek advice in accordance with section 5 of this Notice, below, before loading any solid bulk cargo not specifically listed in the IMSBC Code; and
- .4 to only commence loading if all of the relevant safety criteria contained in the IMSBC Code are met.

1.4 Ship owners, ship operators, and companies shall ensure that shipmasters and crews involved in the transport of solid bulk cargoes are trained in the provisions of the IMSBC Code, including the safety measures contained therein, and to incorporate them into their safety management system procedures.

1.5 Due to the suddenness and possible disastrous results of a bulk cargo suddenly liquefying, IMO issued Circular No. CCC.1/Circ.2, which warns of the dangers of carrying Bauxite, and other cargoes, that may liquefy. All concerned parties in the bulk carrier trade should carefully consider and weigh the warnings and advice contained within that Circular, including:

- .1 heeding the recommendations set forth in paragraph 3.4 of Circular No. CCC.1/Circ.2; and
- .2 where there is any doubt concerning any cargo declaration information, or suspicion that the cargo has been misrepresented, independent cargo testing to determine the flow moisture point (FMP), transportable moisture limit (TML), and actual moisture content (MC) of the cargo to be loaded must be carried out.

2.0 For Cargoes Listed in the IMSBC Code

2.1 The individual schedules contained in the IMSBC Code cover typical cargoes shipping in bulk, together with advice on their properties and methods of handling. These schedules are not exhaustive and the properties attributed to the cargoes are given only for guidance. Consequently, before loading, current valid information from the shipper on

the physical and chemical properties of the cargoes presented for shipment must be obtained.

- 2.2 Where a solid bulk cargo is specifically listed in an individual schedule for solid bulk cargoes (appendix 1 of the Code), it shall be transported in accordance with the provisions in its schedule in addition to the provisions in sections 1 to 10 and 11.1.1 of the Code. The Master, or the ship operator in his or her behalf, shall consult with the competent authorities at the ports of loading and discharge, as necessary, concerning the requirements which may be in force and applicable for carriage.

3.0 For Cargoes Not Listed in the IMSBC Code

- 3.1 **Not Listed:** If a solid cargo is proposed for carriage in bulk and it is not listed in appendix 1 of the IMSBC Code, then the shipper shall, prior to loading, provide the competent authority of the port of loading with the characteristics and properties of the cargo in accordance with section 4 of the IMSBC Code. Based on the information received, the competent authority of the port of loading will assess the acceptability of the cargo for safe shipment.
- 3.2 **When Hazard May be Present:** When it is assessed that the solid bulk cargo proposed for carriage **may present hazards** as those defined by group A¹ or B², the competent authority of the port of loading shall seek advice from the competent authority of the port of unloading and of the RMI Maritime Administrator (the “Administrator”). These three (3) competent authorities (port of loading, port of unloading and Administrator) shall together set the preliminary suitable conditions for the carriage of this cargo.
- 3.3 **No Specific Hazards:** When it is assessed that the solid bulk cargo proposed for carriage **presents no specific hazards** for transportation, the carriage of the cargo shall be authorized. The competent authority of the port of unloading and the Administrator shall be advised by the competent authority of the port of loading of the authorization.

¹ *Group A* consists of cargoes which may liquefy if shipped at a moisture content (MC) in excess of their transportable moisture limit (TML) (see IMSBC Code section 1.7.12).

² *Group B* consists of cargoes which possess a chemical hazard which could give rise to a dangerous situation on a ship (see IMSBC Code section 1.7.13)

- 3.4 The competent authority of the port of loading shall provide to the Master a certificate stating the characteristics of the cargo and the required conditions for carriage and handling of the shipment.
- .1 The Master must not load the cargo if such a certificate is not provided.
 - .2 When deemed necessary, the ship operator or Master must consider engaging the services of an independent cargo surveyor to determine the suitability of the cargo for carriage and handling.
- 3.5 The competent authority of the port of loading must also submit an application to the International Maritime Organization (IMO), within one (1) year from the issue of the certificate, to incorporate this solid bulk cargo into appendix 1 of the IMSBC Code.
- .1 The format of this application is outlined in subsection 1.3.3 of the IMSBC Code.
 - .2 MSC.1/Circ.1453/Rev1 provides Guidelines for the submission of information and completion of the format for the properties of cargoes not listed in the IMSBC Code, how to determine the risk of transport, type and their conditions of carriage, according to subsection 1.3.3 of the IMSBC Code.
- 3.6 Any interference on the part of the competent authority of the port of loading in surveys conducted by ship owner's representative or independent cargo surveyor shall be immediately reported to the Administrator.

4.0 Direct Reduced Iron (DRI)

The Administrator does not permit any exemptions from the requirements of Schedules A, B, or C of the IMSBC Code for the carriage of DRI. Any questions regarding the carriage of DRI should be forwarded to the Merchant Shipping Secretariat.

5.0 Documentation

- 5.1 It should be noted that the following documentation is required to be kept on board for each ship carrying dangerous goods in solid form in bulk:
- .1 special list or manifest setting forth the dangerous goods on board and the location thereof, in accordance with SOLAS Regulation VII/7-2.2;
 - .2 appropriate instruction on emergency response to incidents involving the cargoes; and
 - .3 Document of Compliance per SOLAS Regulation 2/19.4.

5.2 BC Code Certification

Certificates previously issued referencing the BC Code shall remain valid until they expire, provided the IMSBC Code makes no changes regarding the cargo or its carriage requirements. However, some certificates may need to be reissued based on new cargo conditions and carriage requirements of the IMSBC Code.

6.0 Exemptions

6.1 A person may apply for an exemption from a requirement of paragraph 7.2(a) in accordance with the application process.

6.2 The Officer of Merchant Shipping Secretariat must not grant an exemption if it would contravene section 1.5 of the IMSBC Code.

6.3 Before the cargo is loaded on the vessel, the Officer must:

- (a) give a copy of the exemption to the Master of the vessel transporting the cargo to which the exemption applies; and
- (b) Inform the competent authorities, of each jurisdiction the vessel will enter on the voyage, about the exemption.

6.4 The master of the vessel must ensure that a copy of the exemption is kept on the vessel for the duration of each voyage to which the exemption applies.

PART 2 : PROCEDURE FOR LOADING AND UNLOADING SOLID BULK CARGO

1.0 Requirements

The ship, shipper, port terminal and other concerned in safe loading and unloading of bulk cargoes shall in addition comply with the following instructions:

(1) Ships:

(a) Ships nominated bulk cargoes loading from Sri Lankan ports are suitable and in addition the ship master to ensure following that the ship is:

i) Weather tight and efficient in all respects to face the normal perils of the sea for the intended voyage;

ii) Provided with an approved stability and loading booklet approved by the Flag Administration in a language understood by the ship's officers concerned and using standard expression and abbreviations. If the language is neither English, nor French, nor Spanish, a translation into one of these languages should be included;

iii) Provided with hatch openings of sufficient size to enable the cargo to be loaded, stowed and unloaded satisfactorily; and

iv) Provided with the hatch identification numbers used in the loading manual and loading or unloading plan. The location, size and color of these numbers shall be chosen so that they are clearly visible to the operator of the loading or unloading equipment.

(b) Ships which are required to carry out stress calculations shall have on board an approved loading instrument by the flag administration for the rapid calculation of such stresses;

(c) All propulsion and auxiliary machinery shall be in good functional order. Deck equipment relating to mooring and berthing operations, including anchors, cables, mooring lines, hawsers and winches, shall be operational and in good order and condition;

(d) All hatches hatch operating systems and safety devices shall be in good functional order, and used only for their intended purpose.

(e) List indication lights, if fitted, shall be tested prior to loading or unloading and proved operational;

(f) Ship's own cargo handling equipment shall be properly certificated and maintained, and used only under the general supervision of suitably qualified ship's personnel;

(g) Ship Master shall ensure to receive from the shipper of intended cargo, details of the nature of the cargo required under Chapter VI of SOLAS 1974, as amended. Where additional details, such as trimming or continuous measurement of the water in the cargo, etc, are required, the master shall inform the terminal accordingly;

(h) Ship master shall ensure that the prior to the shipment of cargoes stated above the vessel is made cargo worthy;

(i) Ship master shall conduct can test or other test prescribed in the IMSBC Code to the extent reasonable and practicable prior to the acceptance of shipment of cargo along with the terminal representative in case of any doubt about the information submitted by the shipper or quality of cargo;

(j) In the event of any undue commercial influence, the master shall not hesitate to use his authority prescribed under SOLAS Chapter V regulation 34 - 1 and over riding authority under the safety management system as applicable;

(k) In case of non co-operation by the port terminal or shipper or other entities in safe loading of cargo posing threat to safety of the ship, the master shall not hesitate to report the matter to the Competent Authority.

(2) Ship owner, manager or operator when offering a ship for cargo of bulk ensures that the ship:

(a) Is maintained in a sound, seaworthy condition;

(b) has on board a Competent and Qualified Crew;

(c) has on board at least one Officer proficient in the languages used at both the loading and unloading ports, or has an officer available who is proficient in the English language; and

(d) is free of defects that may prejudice the ship's safe navigation, loading or unloading.

(3) Shipper has the following responsibility:

(a) The Shipper shall provide the master or his representative with appropriate information of the relevant bulk cargo sufficiently in advance, prior to loading and if in any doubt shall approach the Competent Authority without any delay;

(b) The Shipper shall provide Cargo Information and Cargo Density Declaration for the said cargo in the prescribed form as specified in the IMSBC Code;

(c) The shipper shall have the samples of cargoes tested for ascertaining the moisture content or transportable moisture limit as per the requirements specified in IMBSC Code.

(4) Port terminal has the following responsibility:

(a) Port terminal operators shall ensure that they only accept ships that can safely berth alongside their installation, taking into consideration issues such as:

(i) Water depth at the berth;

(ii) Maximum size of the ship;

(iii) Mooring arrangements;

(iv) Fendering;

(v) Safe access; and

(vi) Obstructions to loading / unloading operations.

(b) Terminal equipment shall be properly certificated and maintained in accordance with the Port applicable requirements or standards accepted by the Port State Authorities. Such equipments shall only be operated by duly qualified and, if appropriate, certificated personnel required under the applicable laws. However, where automatic weighing equipment is provided, this shall be calibrated at regular intervals as per the port requirements or the manufacturers as the case may be;

(c) Terminal personnel shall be trained in all aspects of safe loading and unloading of bulk carriers or other suitable types of ships, commensurate with their responsibilities at the earliest taking into account that:-

(i) the training shall be designed to provide familiarity with the general hazards of loading, unloading and carriage of bulk cargoes and the adverse effect of improper cargo handling operations that may have on the safety of the ship; and

(ii) Training to such personnel shall be provided by qualified trainer of the port terminals conforming to the standards specified in the port and other laws specified above.

(d) Terminal operators shall ensure that personnel involved in the loading and unloading operations are duly rested to avoid fatigue;

(e) The port terminal shall cover the stockpiles of cargo likely to be adversely affected by precipitation or high humidity or rain or weather conditions during the seasonal monsoon in Sri Lankan waters to the extent reasonable and practicable;

(f) The port terminal shall provide proper drainage system for water from the cargo lying in the open areas of its premises to the extent practicable and reasonable;

(g) The port terminal shall to the extent reasonable and practicable ensure adequate number of approved laboratory test houses availability within the port premises for carrying out efficient and effective testing of samples submitted by the shipper or the ship owner to verify the compliance of moisture content or transportable moisture limit of such cargoes;

(h) The port terminals engaged in the shipment of the bulk cargoes may be audited by the Competent Authority if necessary for the purpose of verification of compliance with the relevant provisions of IMSBC Code at periodical intervals;

(i) The port terminals, if approached by the master of the ship in need of any assistance to prevent shipping casualty after the shipment of such cargoes shall provide safe and sheltered place to such ships to take corrective measures.

(v) Lab tests houses and cargo surveyors of shippers / exporters:

(a) All laboratory test houses conducting the tests on cargo samples of such cargoes under Section 8 (test procedures for cargo that may liquefy) and appendix 2 (laboratory test procedures, associated apparatus and standards) under IMSBC Code shall be duly accepted by the shipper, ship or their representative. In the interim such acceptance shall be construed as having the approval of the Competent Authority;

(b) All personnel conducting such tests shall be suitably qualified and experienced;

(c) the cargo surveyors appointed by shippers / exporters shall be suitably qualified and experienced for the purpose of informing the terminal representative in respect of cargo quantity, quality and suitability of such cargoes for shipments from Sri Lankan ports;

(d) To avoid any dispute between the concerned parties with respect to sampling of cargoes, to the extent possible, the samples may be drawn jointly in presence of shipper and ship's representative. The sampling may be carried out in accordance with procedures prescribed in Section 4 of IMSBC Code.

(vi) For the purpose of compliance, provisions of the relevant section of SOLAS 1974 as amended, IMSBC Code, BLU Code, IMDG Code & related IMO resolutions can be referred.

2.0 Check List, Procedures And Forms

Ship Specific / Company specific following Procedures, Check lists and Forms will be accepted.

- a. Requirements in relation to the operational suitability of bulk carriers for loading and unloading solid bulk cargoes.
- b. Checklist to show the suitability of vessel for loading and unloading solid bulk cargoes.
- c. Requirements in relation to the suitability of terminals.
- d. Requirements in relation to the suitability of terminals for loading and unloading solid bulk cargoes.
- e. Responsibilities of the Master.
- f. Form for required cargo information (Shipper's declarations).
- g. Responsibilities of the Terminal representative.
- h. Procedure between Bulk carrier and Terminal.
- i. Appendix 2 of the BLU Code (loading or unloading plans).
- j. Guidelines on completing the ship / shore safety checklist
- k. Ship/shore safety checklist for loading and unloading of dry bulk carriers.

For this purpose of the IMSBC code compliance, Master or Owner or Agent should submit related documents as mentioned in 2.0 to the Merchant Shipping Secretariat and / or Harbour Master's representative on request.

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