
STATUTORY INSTRUMENTS

1999 No. 336

MERCHANT SHIPPING

SAFETY

The Merchant Shipping (Carriage of Cargoes) Regulations 1999

Made - - - - - *9th February 1999*
Laid before Parliament *19th February 1999*
Coming into force - - - *15th March 1999*

The Secretary of State for the Environment, Transport and the Regions, after consulting the persons referred to in section 86(4) of the Merchant Shipping Act 1995(1), in exercise of the powers conferred by section 85(1)(a) and (b), (3) and (5) to (7) and section 86(1) of that Act, and of all other powers enabling him in that behalf, hereby makes the following Regulations:

PART I

General

Citation, commencement and revocation

1.—(1) These Regulations may be cited as the Merchant Shipping (Carriage of Cargoes) Regulations 1999 and shall come into force on 15th March 1999.

(2) The Merchant Shipping (Carriage of Cargoes) Regulations 1997(2) and the Merchant Shipping (Carriage of Cargoes) (Amendment) Regulations 1997(3) are hereby revoked.

Interpretation

2.—(1) In these Regulations except where the context requires otherwise:

“Administration”, in relation to United Kingdom ships, means the Secretary of State;

“appropriate cargo information” means information relevant to the cargo and its stowage and securing, which should specify in particular the precautions necessary for the safe carriage of that cargo by sea;

(1) 1995 c. 21; sections 85 and 86 were amended by the Merchant Shipping and Maritime Security Act 1997 (c. 28), section 8.
(2) S.I.1997/19, amended by S.I. 1997/2366.
(3) S.I. 1997/2366.

“bulk cargo” means cargo carried in bulk;

“cargo” means any cargo which, owing to its particular hazard to ships or persons on board, may require special precautions, with the exception of liquids carried in bulk and gases carried in bulk;

“Cargo Securing Manual” means a manual drawn up to the standard contained in the Maritime Safety Committee Circular of the Organisation, MSC/Circ. 745, dated 13th June 1996, and approved, in the case of United Kingdom ships by the Secretary of State, or in the case of other ships by or on behalf of the flag state;

“cargo ship” means a ship which is not a passenger ship, troop ship, pleasure vessel or fishing vessel;

“cargo hold” or “cargo space” means any hold or space in the ship appropriated for the carriage of cargo;

“cargo unit” includes a cargo transport unit and means wheeled cargo, vehicle, container, flat, pallet, portable tank, packaged unit, or any other cargo, and loading equipment, or any part thereof, which belongs to the ship and which is not fixed to the ship;

“cargoes which may liquefy” means cargoes which are subject to moisture migration and subsequent liquefaction if shipped with a moisture content in excess of the transportable moisture limit;

“Certifying Authority” means the Secretary of State or any other person or organization authorised by the Secretary of State;

“container” means an article of transport equipment as defined in the International Convention for Safe Containers, (CSC 1972), published by the Organisation;

“Department” means the Department of the Environment, Transport and the Regions;

“flag state” in relation to a ship means the state in which the ship is registered or, if unregistered, whose flag it is entitled to fly;

“flow moisture point” means the percentage moisture content (wet weight basis) at which a flow state develops under the methods of test in a representative sample of the material as prescribed by the Code of Safe Practice for Solid Bulk Cargoes (BC Code), published by the Organisation;

“flow state” means the condition when a mass of granular material is saturated with liquid to an extent that under prevailing external forces such as vibration, impaction or ship’s motion, it loses its internal shear strength and behaves as a liquid;

“forwarder” means a person who receives the appropriate cargo information in preparation for eventual delivery of the cargo to the ship or its agent, and may include a cargo packer or consolidator;

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

“in bulk”, except in the context of roll-on roll-off cargo spaces, means directly and without intermediate form of containment in a hold, tank or cargo space forming a structural part of, or permanently attached to, a ship;

“International Grain Code” means the International Code for the Safe Carriage of Grain in Bulk adopted by the Maritime Safety Committee of the Organisation by resolution MSC.23(59) on 23rd May 1991;

“Merchant Shipping Notice” means a Notice described as such, issued by the Department;

“moisture content” means the amount of moisture present in a particular sample expressed as a percentage by weight of the total wet weight of the sample;

“the Organisation” means the International Maritime Organization;

“offshore supply vessel” means a ship which is used for the transportation of stores, materials, equipment and personnel between a base ashore and offshore installations or between offshore installations;

“operator of the terminal” means the person under whose control are the activities at the terminal;

“passenger ship” means a ship carrying more than 12 passengers;

“pleasure vessel” has the same meaning as in regulation 2(1) of the Merchant Shipping (Cargo Ship Construction) Regulations 1997(4);

“roll-on roll-off cargo spaces” means spaces not normally subdivided in any way and extending to either a substantial length or the entire length of the ship in which the goods (packaged or in bulk, in or on rail or road cars, vehicles (including road or rail tankers), trailers, containers, pallets, demountable tanks or in or on similar stowage units or other receptacles) can be loaded and unloaded normally in a horizontal direction;

“shipper” means any person who, whether as principal or agent for another, consigns goods for carriage by sea;

“SOLAS Convention” means the International Convention for the Safety of Life at Sea 1974(5), and its Protocol of 1978(6), as amended, in force at 1st July 1998;

“terminal” means any terminal, jetty, pier, floating structure or other works within a harbour at which ships can obtain shelter or ship and unship goods or passengers;

“tons” means gross tons; and a ship to which regulation 12 of the Merchant Shipping (Tonnage) Regulations 1997(7) refers may continue to use the gross tonnage additionally ascertained, in accordance with the provisions of Schedule 5 (and appendices 1 to 4 thereto), to the Merchant Shipping (Tonnage) Regulations 1982(8). Where a ship has alternative tonnages under that Schedule, the tonnage which may be used shall be the larger of those tonnages;

“transportable moisture limit” means 9/10ths of the flow moisture point;

“trimming” means any levelling of the material within a cargo space, either partial or total, by means of loading spouts or chutes, portable machinery, equipment or manual labour.

(2) Unless otherwise stated a reference in a regulation to a numbered paragraph is a reference to the paragraph of that number in the regulation.

(3) Any reference in these Regulations to any Code, Convention or Merchant Shipping Notice shall include a reference to any document amending it which is considered by the Secretary of State to be relevant from time to time and is specified in a Merchant Shipping Notice.

(4) Any approval given pursuant to these Regulations shall be given in writing and shall specify the date when it is to come into force and the conditions (if any) on which it is given.

(5) Where a ship is operated by a person other than its owner, (whether on behalf of the owner or some other person, or on his own behalf) a reference in these Regulations to the owner shall be construed as including a reference to that person.

(6) In interpreting the International Grain Code—

(a) the requirements having been made mandatory under regulation 11 the language thereof shall be construed accordingly;

(b) the definitions set out in section A2 of that Code shall apply;

(4) S.I. 1997/1509.

(5) Cmnd. 7874.

(6) Cmnd. 7364.

(7) S.I. 1997/1510.

(8) S.I. 1982/841, to which there were amendments not relevant to these Regulations.

- (c) references to the Administration shall, in relation to United Kingdom ships, be references to the Secretary of State, and references to the Contracting Government of the port of loading, in relation to all ships loading in the United Kingdom, shall be references to the Secretary of State.

Application

3.—(1) These Regulations apply to:

- (i) sea-going United Kingdom ships wherever they may be, and
- (ii) sea-going ships which are not United Kingdom ships while they are within United Kingdom waters,

when loaded or intended to be loaded with any cargo.

(2) These Regulations apply to the carriage of all cargoes, but are subject to any requirements contained in the Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997⁽⁹⁾, in respect of the carriage of dangerous goods and marine pollutants as defined in those Regulations. Where any requirement in those Regulations regulates an aspect of carriage provided for in these Regulations, those Regulations shall apply to that extent, and not these.

PART II

General Provisions

Cargo information

4. (1) (a) The shipper shall, subject to paragraph (4) below, provide such information to the owner or master sufficiently in advance of loading as is necessary to enable them to ensure that—

- (i) the different commodities to be carried are compatible with each other or suitably separated;
- (ii) the cargo is suitable for the ship;
- (iii) the ship is suitable for the cargo; and
- (iv) the cargo can be safely stowed and secured on board the ship and transported under all expected conditions during the intended voyage.

(b) The cargo information referred to in sub-paragraph (a) shall include:

- (i) in the case of general cargo and cargo carried in cargo units, a general description of the cargo, the gross mass of the cargo or cargo units and any relevant special properties of the cargo;
- (ii) in the case of bulk cargoes, information on the stowage factor of the cargo, the trimming procedures, the likelihood of shifting including angle of repose, if applicable, and any other relevant special properties. In the case of a concentrate or other cargo which may liquefy, additional information in the form of a certificate indicating the moisture content of the cargo and its transportable moisture limit;
- (iii) in the case of bulk cargoes which are not classified in accordance with Regulation VII/2 of the SOLAS Convention, but have chemical properties that may create a potential hazard, information on its chemical properties in addition to that required by sub-paragraph (ii) above.

(2) The information shall be confirmed in writing and by appropriate shipping documents prior to loading the cargo on the ship.

(9) S.I. 1997/2367.

(3) In preparing cargo units for carriage by ships, the shipper or, as the case may be, the forwarder, shall ensure that the gross mass of such units is in accordance with the gross mass declared on the shipping documents.

(4) Where the shipper does not deliver the cargo to the ship or its agent he shall provide the forwarder with such cargo information.

(5) If the shipper does not deliver the cargo to the ship or its agent it shall be the duty of the forwarder to provide the owner or master with the appropriate cargo information.

(6) If a shipper or forwarder fails to provide appropriate cargo information as required by this regulation, or furnishes cargo information which he knows to be false or recklessly furnishes cargo information which is false, he shall be guilty of an offence.

(7) If an owner or master accepts for carriage, or takes or receives on board any cargo for which appropriate cargo information as required by this regulation has not been furnished, he shall be guilty of an offence.

Carriage of documentation

5.—(1) The owner and master of every ship to which these Regulations apply, other than a ship engaged in the carriage of grain, shall ensure that appropriate documentation, relevant to the cargo and its stowage and securing, which should specify in particular the precautions necessary for the safe carriage of that cargo by sea, is carried on board.

(2) Such documentation may consist of one or more of the following Codes of Safe Practice:

- (a) the Code of Safe Practice for Cargo Stowage and Securing adopted by the Organization by Resolution A.714(17), 1992 edition, as amended in 1994 and 1995;
- (b) the Code of Safe Practice for Ships Carrying Timber Deck Cargoes adopted by the Organization by Resolution A.715(17), 1992 edition; and
- (c) the Code of Safe Practice for Solid Bulk Cargoes (BC Code) adopted by the Organisation by Resolution A.434(XI), 1991 edition, as amended in 1996.

(3) The owner and master of every ship carrying grain to which these Regulations apply shall ensure that the International Grain Code is carried on board.

(4) All passenger ships and cargo ships carrying cargoes other than solid bulk cargoes, except cargo ships of less than 500 tons engaged on voyages which are not international voyages, shall carry on board a Cargo Securing Manual.

(5) An owner or master who contravenes paragraph (1) or (3) above shall be guilty of an offence.

Stowage and securing

6.—(1) The owner and master shall ensure that:

- (a) cargo and cargo units carried on or under deck are loaded, stowed and secured so as to prevent as far as is practicable, throughout the voyage, damage or hazard to the ship and the persons on board, and loss of cargo overboard;
- (b) appropriate precautions are taken during loading and transport of heavy cargoes or cargoes with abnormal physical dimensions to ensure that no structural damage to the ship occurs and to maintain adequate stability throughout the voyage;
- (c) appropriate precautions are taken during loading and transport of cargo units on board ro-ro ships, especially with regard to the securing arrangements on board such ships and on the cargo units and with regard to the strength of the securing points and lashings; and
- (d) cargo on board all ships to which regulation 5(4) is applicable is stowed and secured throughout any voyage in accordance with the Cargo Securing Manual; and

- (e) cargo on board all ships to which regulation 5(4) is applicable with roll-on/roll-off cargo spaces, shall be stowed and secured in accordance with the Cargo Securing Manual before the ship leaves a berth.
- (2) Where packaged goods have been packed into or onto a cargo unit, the shipper or forwarder of such goods shall ensure that:
 - (a) the cargo is packed and secured so as to prevent, throughout any voyage, damage or hazard to the ship and the persons on board; and
 - (b) if the cargo unit is a container, it is not loaded to more than the maximum gross weight indicated on the Safety Approval Plate attached to the container in accordance with the International Convention for Safe Containers (CSC 1972), published by the Organization.
- (3) (a) An owner or master who contravenes paragraph (1) shall be guilty of an offence;
 - (b) a shipper or forwarder who contravenes paragraph (2) shall be guilty of an offence.

Oxygen analysis and gas detection equipment

7.—(1) In the case of a ship transporting or accepting for transport a bulk cargo which is liable to emit a toxic or flammable gas, or cause oxygen depletion in the cargo hold, an appropriate instrument for measuring the concentration of gas or oxygen in the air shall be provided together with detailed instructions for its use. Such an instrument shall be of a type approved by a certifying authority, and the crew shall be trained in its use.

(2) An owner of a ship which transports, or a master who accepts for carriage, such a bulk cargo without ensuring that paragraph (1) has been complied with shall be guilty of an offence.

The use of pesticides in ships

8.—(1) Where pesticides are used in cargo spaces, they shall be used in accordance with Merchant Shipping Notice M.1718 (“Recommendations on the Safe Use of Pesticides in Ships”).

(2) If paragraph (1) is not complied with the owner and master shall each be guilty of an offence.

PART III

Special Provisions For Bulk Cargoes Other Than Grain

Acceptability for loading

9.—(1) Prior to loading a bulk cargo the master shall be in possession of stability information, provided pursuant to regulation 32 of the Merchant Shipping (Load Line) Regulations 1998⁽¹⁰⁾ containing comprehensive information on the ship’s stability and on the distribution of cargo and ballast for the standard loading conditions.

(2) The master shall not accept for loading concentrates or other cargoes which may liquefy unless:

- (i) either the moisture content of the cargo indicated in the certificate referred to in regulation 4(1)
 - (b) is less than its transportable moisture limit or
- (ii) if the moisture content is above that limit, appropriate safety arrangements are made to the satisfaction of the Certifying Authority to ensure adequate stability in the case of cargo shifting, and the ship has adequate structural integrity.

⁽¹⁰⁾ S.I. 1998/2241.

(3) Prior to loading a bulk cargo referred to in regulation 4(1)(b)(iii), appropriate special precautions for its safe carriage shall be taken.

(4) The owner shall ensure that the master is furnished with the information referred to in paragraph (1).

(5) The master shall not accept cargo for loading unless:

- (a) he has in his possession the information required by paragraph (1),
- (b) he is satisfied by calculations that the proposed loading arrangements would ensure sufficient stability in accordance with the stability information provided under paragraph (1); and
- (c) he is satisfied that, in the case of a cargo to which paragraph (3) applies, the precautions required by that paragraph have been taken.

(6) An owner who contravenes paragraph (4) shall be guilty of an offence.

(7) A master who contravenes paragraph (2) or (5) shall be guilty of an offence.

Loading, unloading and stowage of bulk cargoes

10. (1) (a) In this regulation “terminal representative” means an individual who represents the terminal or other facility where the ship is loading or unloading and who has responsibility for operations conducted by that terminal or facility with regard to the particular ship.

- (b) For the purposes of paragraphs (3) and (7) of this regulation, the appropriate authority of a port in the United Kingdom shall be the harbour authority of that port. If a terminal in the port is not operated by the harbour authority, then the operator of the terminal shall be the appropriate authority.

(2) To enable the master to prevent excessive stresses in the ship’s structure, it shall be the duty of the owner to ensure the ship shall be provided with a cargo loading manual, which shall be written in a language with which the ship’s officers responsible for cargo operations are familiar. If this language is not English, the ship shall be provided with a manual written also in the English language. The manual may consist of one or more booklets and shall, as a minimum, include:

- (a) stability data, to the extent required by regulation 32 of the Merchant Shipping (Load Line) Regulations 1998⁽¹¹⁾;
- (b) ballasting and deballasting rates and capacities;
- (c) maximum allowable load per unit surface area of the tank top plating;
- (d) maximum allowable load per hold;
- (e) general loading and unloading instructions with regard to the strength of the ship’s structure including any limitations on the most adverse operating conditions during loading, unloading, ballasting operations and the voyage;
- (f) any special restrictions such as limitations on the most adverse operating conditions imposed by the Administration or organization recognised by it, if applicable; and
- (g) where strength calculations are required, maximum permissible forces and moments on the ship’s hull during loading, unloading and the voyage.

(3) Before a solid bulk cargo is loaded or unloaded, the master and the terminal representative shall agree on a plan which:

- (i) shall ensure that the permissible forces and moments on the ship are not exceeded during loading or unloading, and
- (ii) shall include the sequence, quantity and rate of loading or unloading,

⁽¹¹⁾ S.I. 1998/2241.

taking into consideration the intended speed of loading or unloading, intended number of pours and the deballasting or ballasting capability of the ship. The plan and any subsequent amendments thereto shall be lodged with the appropriate authority of the port State.

(4) It shall be the duty of the master to ensure that bulk cargoes are loaded and trimmed reasonably level, as necessary, to the boundaries of the cargo space so as to minimize the risk of shifting and to ensure that adequate stability will be maintained throughout the voyage.

(5) It shall be the duty of the master to ensure that:

- (a) when bulk cargoes are carried in 'tween-decks, the hatchways of such 'tween-decks are closed in those cases where the loading information indicates an unacceptable level of stress of the bottom structure if the hatchways are left open;
- (b) the cargo is trimmed reasonably level and either extends from side to side or is secured by additional longitudinal divisions of sufficient strength;
- (c) the safe load-carrying capacity of the 'tween-decks is observed to ensure that the deck-structure is not overloaded.

(6) The master and terminal representative shall ensure that loading and unloading operations are conducted in accordance with the plan agreed under paragraph (3).

(7) (a) If during loading or unloading any of the limits of the ship referred to in paragraph (2) are exceeded or are likely to become so if the loading or unloading continues, the master has the right to suspend operation, and if he does so he shall notify accordingly the appropriate authority of the port State with which the plan has been lodged.

- (b) Where sub-paragraph (a) applies the master and the terminal representative shall ensure that corrective action is taken.
- (c) When unloading cargo, the master and terminal representative shall ensure that the unloading method does not damage the ship's structure.

(8) (a) The master shall ensure that ship's personnel continuously monitor cargo operations.

- (b) Where possible, the ship's draught shall be checked regularly during loading or unloading to confirm the tonnage figures supplied.
- (c) Each draught and tonnage observation shall be recorded in a cargo log-book.
- (d) If significant deviations from the plan agreed under paragraph (3) are detected, cargo or ballast operations or both shall be adjusted to ensure that the deviations are corrected.

(9) (a) An owner who contravenes paragraph (2) shall be guilty of an offence.

- (b) A master who contravenes paragraphs (3), (4), (5), (6), (7)(b) or (c) or (8) shall be guilty of an offence.
- (c) A terminal representative in the United Kingdom who contravenes paragraphs (3), (6), (7) (b) or (c) shall be guilty of an offence.

PART IV

Requirements for Cargo Ships Carrying Grain

International Grain Code

11.—(1) A ship carrying grain shall comply with the requirements of the International Grain Code.

(2) Without prejudice to paragraph (1) or any other requirement of these Regulations, the owner and master shall ensure that:

- (a) a ship loading grain complies with the International Grain Code; and
 - (b) subject to paragraph (4)(b), the ship has on board a document of authorisation as required by the International Grain Code. In the case of a United Kingdom ship the document of authorisation shall be issued by the Certifying Authority.
- (3) Except when a ship may be in distress, the owner and master shall not permit a ship loaded with grain in bulk outside the United Kingdom to enter any port in the United Kingdom so laden, unless the ship has been loaded in accordance with the International Grain Code.
- (4) No person shall order the commencement of the loading of grain into a ship in the United Kingdom unless he is satisfied that:
- (a) the ship has on board a document of authorisation referred to in paragraph (2)(b); or
 - (b) the master has demonstrated to the satisfaction of the Certifying Authority that the ship will, in its proposed loading condition, comply with the appropriate requirements of the International Grain Code and has obtained a document to this effect signed by a surveyor of such a Certifying Authority.
- (5) An owner or master who contravenes paragraph (2) or (3) shall be guilty of an offence.
- (6) A person who contravenes paragraph (4) shall be guilty of an offence.

PART V

Enforcement

Power to detain

12. In any case where a ship does not comply with the requirements of these Regulations the ship shall be liable to be detained and section 284 of the Merchant Shipping Act 1995(**12**) (which relates to the detention of a ship) shall have effect in relation to the ship, subject to the modification that as if for the words “this Act”, wherever they appear, there were substituted the words “the Merchant Shipping (Carriage of Cargoes) Regulations 1999”.

Penalties and defences

13.—(1) A person guilty of an offence under Part II, III or IV of these Regulations shall be liable on summary conviction to a fine not exceeding the statutory maximum or, on conviction on indictment, to imprisonment for a term not exceeding two years or a fine or both.

(2) In any proceedings for an offence under Part II, III or IV of these Regulations it shall be a defence for a person to prove that all reasonable steps had been taken by that person to ensure compliance with the Regulations.

Offences due to the fault of another person

14. Where the commission by any person of an offence under Part II, III or IV of these Regulations is due to the act or default of some other person, that other person shall be guilty of the offence. A person may be charged with and convicted of the offence by virtue of this Regulation whether or not proceedings are taken against the first mentioned person.

(12) Section 284 was amended by the Merchant Shipping and Maritime Security Act 1997 (c. 28), Schedule 1.

Equivalentents and exemptions

15.—(1) Where these Regulations, or documentation referred to in these Regulations, require that a particular piece of equipment, or type thereof, shall be provided or carried in a ship, or that any particular provision shall be made, the Certifying Authority shall permit any other piece of equipment to be provided or carried, or any other provision to be made in that ship if he is satisfied by trials thereof or otherwise that such other piece of equipment or provision is at least as effective as that required by these Regulations, or information referred to in these Regulations.

(2) For the purposes of these Regulations, the results of verification and tests carried out by bodies or laboratories of other member States of the Organization offering suitable and satisfactory guarantees of technical and professional competence and independence shall be accepted.

(3) The Secretary of State may exempt any ship from all or any of the provisions of these Regulations as may be specified in the exemption on such terms (if any) as he may specify and, on giving reasonable notice, he may alter or cancel such an exemption.

Signed by authority of the Secretary of State

Glenda Jackson
Parliamentary Under Secretary of State, the
Department of the Environment, Transport and
the Regions

9th February 1999

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations consolidate the Merchant Shipping (Carriage of Cargoes) Regulations 1997 and the Merchant Shipping (Carriage of Cargoes) (Amendment) Regulations 1997, implementing Chapter VI of the International Convention for the Safety of Life at Sea 1974 (SOLAS) as amended. The Regulations also implement amendments adopted on 14th June 1996 by the Maritime Safety Committee of the International Maritime Organization at its 66th session by Resolution MSC.47(66).

The principal change is that the master and the terminal representation are required to agree a loading plan before bulk cargoes are loaded. The plan must be adhered to, and the master may stop loading if the permissible limits are or might be breached (*regulation 10*).

Copies of the Safety of Life at Sea Convention 1974, and amendments, of the various Codes referred to in the Regulations, and of the Convention for Safe Containers 1972 are obtainable from the International Maritime Organization, 4 Albert Embankment, London, SE1 7SR.

Merchant Shipping Notices are obtainable from Eros Marketing Support Services, Unit B, Imber Court Trading Estate, Orchard Lane, East Molesey, Surrey KT8 0BN.