

MEANS OF ACCESS AND SAFE MOVEMENT

6.1 Means of Access

6.1.1 *Merchant Shipping Regulations place an obligation on both the master of a ship and the employer of the master to ensure that a safe means of access is provided and maintained, both between the ship and the shore or another ship alongside which the ship is secured. In carrying out the duties arising from these Regulations full account must be taken of the principles and the guidance in Chapter 18 of this Code.*

6.1.2 *Where the provision of equipment is necessary to ensure safe means of access it must be placed in position promptly, be properly rigged and deployed, safe to use and adjusted as necessary to maintain safe access.*

6.1.3 *When access equipment is provided from the shore it is still the responsibility of the master to ensure as far as is reasonably practicable that the equipment meets these requirements.*

6.1.4 *Any access equipment and immediate approaches to it must be adequately lit. For these areas a lighting level of at least 20 lux should be provided (measured at a height of 1 metre above the surface level) unless:-*

- (a) a higher level is required by other Regulations.*
- (b) provision of such levels of lighting would contravene other Regulations, eg the Collision Regulations and the Distress Signals Order.*

Guidance on lighting is given in Chapter 13 (and Chapter 18).

6.1.5 *Any equipment used for the provisions of means of access and any safety net must be fit for purpose and properly maintained. Accommodation ladders and any portable or rope ladders used for access must comply with*

the standards in Annex 18.1 of the Code. All access equipment should be inspected by a competent person at appropriate intervals.

6.1.6 *A portable ladder should only be used for access to the ship where no safer access is reasonably practicable. A rope ladder should only be used between a ship with high freeboard and a ship with low freeboard or between a ship and a boat if no safer means of access is reasonable practicable.*

6.1.7 *A life-buoy with a self-activating light and also a separate buoyant safety line attached to a quoit or some similar device must be provided ready for use at the point of access aboard the ship.*

6.1.8 *An adequate number of safety nets of a suitable size and strength are to be carried on the ship or otherwise be readily available. Where there is a risk of a person falling from the access equipment or from the quayside or ship's deck adjacent to the access equipment, a safety net shall be mounted where reasonably practicable. Guidance on the rigging of safety nets is in Chapter 18.*

6.2 Use of Equipment

6.2.1 *When suitable access equipment is provided from the ship or from the shore or from another ship, any person boarding or leaving the ship must use that equipment.*

6.3 Access for Pilots

6.3.1 *Merchant Shipping Regulations require the owner to provide pilot ladders, accommodation ladders and hoists which comply with the construction and testing requirements laid out in the Regulations. Guidance on these standards is included in Annex 18.1.*

6.3.2 *In addition, the Regulations require the master to ensure that:*

- *each pilot ladder, accommodation ladder, hoist and associated equipment is properly maintained and stowed, and regularly inspected to ensure that, so*

far as is reasonably practicable, each is safe to use.

- each pilot ladder and hoist is used only for the embarkation and disembarkation of pilots and by officials and other persons while a ship is arriving at or leaving a port.
- the rigging of the pilot ladder, accommodation ladder, hoist and associated equipment is supervised by a responsible officer who is in communication with the navigating bridge. This officer's duties will include arranging for the pilot to be escorted by a safe route to and from the bridge. Advice on safe rigging of such equipment is in Chapter 18.
- personnel engaged in rigging or operating any mechanical equipment are instructed in the safe procedures to be adopted and that the equipment is to be tested prior to each use.

6.3.4 A safety-line and harness, a life-buoy with a self-igniting light, and a heaving line should be kept at hand ready for use.

6.3.5 The pilot ladder or hoist overside and its controls, and also the position where the person embarks and disembarks on the ship should be adequately lit.

6.3.6 The owner and the master must ensure that there is on board a copy of the approved manufacturer's maintenance manual for the hoist, containing a maintenance log book. The hoist must be maintained in accordance with the maintenance manual, and a record kept by the responsible officer in the maintenance log book.

6.3.7 The master is required to ensure that the hoist is subject to regular test rigging and inspection. Such tests should be carried out by designated ship's personnel at regular intervals. All tests should be logged.

6.4 Safe Movement

6.4.1 Merchant Shipping Regulations place an obligation on both the master of a ship and the employer of the master to ensure that a safe means of access is provided and maintained to any place on the ship to which a person may be

expected to go. In carrying out the duties arising from these Regulations full account must be taken of the principles and the guidance in Chapter 13 of this Code.

6.4.2 Places on the ship where people may be expected to be include accommodation areas as well as normal places of work. "Persons" in this context include passengers, dock-workers, and other visitors to the ship on business but exclude persons who have no right to be on the ship.

6.4.3 All deck surfaces used for transit about the ship and all passageways, walkways and stairs must be properly maintained and kept free from substances liable to cause a person to slip or fall.

6.4.4 Areas used for the loading or unloading of cargo or for other work processes or for transit should be adequately and appropriately illuminated.

6.4.5 For areas used for loading or unloading of cargo or for other work processes a lighting level of at least 20 lux should be provided and for transit areas a level of at least 8 lux should be provided (measured at a height of 1 metre above the surface level) unless:-

- (a) a higher level is required by other Regulations, eg the Crew Accommodation Regulations; or,
- (b) provision of such levels of lighting would contravene other Regulations, eg the Collision Regulations and the Distress Signals Order.

General rules for where these specific regulations do not apply are given in Chapter 13.

6.4.6 The employer and master are also responsible for ensuring that any permanent safety signs displayed on board the ship comply with the Regulations and Merchant Shipping Notice.

6.4.7 Any opening, open hatchway or dangerous edge into, through or over which a person may fall shall be fitted with secure guards or fencing of adequate design and construction. Advice on guard-rails and safety fencing is given in Chapter 13. These requirements do not apply where the opening is a permanent

access way, or where work is in progress which could not be carried out with the guards in place.

6.4.8 *All ship's ladders must be of good construction and sound material, strong enough for the purpose for which they are used, free from patent defect and properly maintained. Ladders providing access to the hold must comply with the standards in Annex 6.1.*

6.4.9 *Suitable hand-holds should be provided at the top and at any intermediate landing place of all fixed ladders.*

6.4.10 *The Regulations also require the employer and master to ensure that ship's powered vehicles (which includes mobile lifting plant) are only driven by a competent person who is authorised to do so, and to ensure that they are used safely. Such vehicles must be properly maintained.*

6.5 Entry into dangerous spaces

6.5.1 *A dangerous space is defined in the regulations as "any enclosed or confined space in which it is foreseeable that the atmosphere may at some stage contain toxic or flammable gases or vapours, or be deficient in oxygen, to the extent that it may endanger the life or health of any person entering that space."* Section 17.4. gives advice on identifying these hazards.

6.5.2 *The master is required to ensure that all unattended dangerous spaces are secured against entry, except when it is necessary to enter.*

6.5.3 *Employers must have procedures in place for entering and working in confined spaces, and it is the master's responsibility to ensure these are followed. No person should enter or remain in a dangerous space except in accordance with the set procedures.*

6.5.4 *The guidance in this Code (Chapter 17) must be taken into account both in drawing up and implementing the procedures.*

STANDARDS FOR HOLD ACCESS

Hold Access - New Ships

Where the keel of a ship is laid or the ship is at a similar stage of construction, after 31 December 1988 the following standards of hold access should be provided:-

- (i) The access shall be separate from the hatchway opening, and shall be by a stairway if possible.
- (ii) A fixed ladder, or a line of fixed rungs, shall have no point where they fill a reverse slope.
- (iii) The rungs of a fixed ladder shall be at least 300 mm wide, and so shaped or arranged that a person's foot cannot slip off the ends. Rungs shall be evenly spaced at intervals of not more than 300 mm and there shall be at least 150 mm clear space behind each rung.
- (iv) There shall be space outside the stiles of at least 75 mm to allow a person to grip them.
- (v) There shall be a space at least 760 mm wide for the user's body, except that at a hatchway this space may be reduced to a clear space of at least 600 mm by 600 mm.
- (vi) Fixed vertical ladders should be provided with a safe intermediate landing platform at intervals of not more than 9 metres.
- (vii) Where vertical ladders to lower decks are not in a direct line a safe intermediate landing shall be provided.
- (viii) Intermediate landings shall be of adequate width and afford a secure footing and extend from beneath the foot of the upper ladder to the point of access to the lower ladder. They shall be provided with guard rails.
- (ix) Fixed ladders and stairways giving access to holds shall be so placed as to minimise the risk of damage to them from cargo handling operations.

- (x) Fixed ladders shall, if possible, be so placed or installed as to provide back support for a person using them; but hoops shall be fitted only where they can be protected from damage to them from cargo handling operations.

Hold Access - Existing Ships

Where the keel of a ship was laid or the ship was at a similar stage of construction before 1 January 1989, at least the following standards of hold access should be provided:-

- (i) Access should be provided by steps or ladder, except;
 - (a) at coamings; and
 - (b) where the provision of a ladder on a bulkhead or in a trunk hatchway is clearly not reasonably practicable.

In such cases ladder cleats or cups may be used.

- (ii) All ladders between lower decks should be used in the same line as the ladder from the top deck, unless the position of the lower hatch or hatches prevent this.
- (iii) Cleats or cups should be at least 250 mm wide and so constructed as to prevent a person's foot slipping off the side.
- (iv) Each cleat, cup, step or rung of a ladder shall provide a foothold, including any space behind the ladder, at least 115 mm deep. Cargo should not be stowed as to produce this foothold.
- (v) Ladders which are reached by cleats or cups on a coaming should not be recessed under the deck more than is reasonably necessary to keep the ladder clear of the hatchway.
- (vi) Shaft tunnels should be equipped with adequate handholds and footholds on each side.
- (vii) All cleats, cups, steps or rungs of ladders should provide adequate handholds.

Portable ladders

A portable ladder should only be used where no safer means of access is reasonably practicable.

Portable ladders should be pitched between 60° and 75° from the horizontal, properly secured against slipping or shifting sideways and be so placed as to afford a clearance of at least 150 mm behind the rungs. Where practicable the ladder should extend to at least 1 metre above any upper landing place unless there are other suitable handholds.