

N.B. Unofficial translation, legally binding only in Finnish and Swedish

No. 633/2004
Government Decree
on the Occupational Safety in Loading and Unloading of Ships

Issued in Helsinki on 1 July 2004

Chapter 1
General provisions

Section 1
Scope of application

- (1) This decree applies to the loading and unloading of ships as well as to handling of goods and any other port work immediately incidental thereto. However, the Decree is applied to a port holder and a ship owner only in a port referred to in section 62(2) in the Occupational Safety and Health Act (738/2002).
- (2) In addition, the following also lay down provisions on occupational safety in ports: Government Decision on the protection of workers from dangers and hazards of noise at the workplace (1404/1993), Government Decision on the selection and use of personal protective equipment (1407/1993), Government Decision concerning manual lifting and moving operations at work (1409/1993), Government Decision on safety markings at workplaces and their use (976/1994), Government Decision concerning the acquisition, safe use and inspection of machinery used at work and other work equipment (856/1998), Government Decision concerning the use of cranes and forklift trucks for lifting persons (793/1999), Government Decision on the control of major accident hazards liable to affect workers (922/1999), Government Decree on chemical agents at work (715/2001), Government Decree on safety and health requirements in the workplace (577/2003) and other statutes issued by virtue of Occupational Safety and Health Act.

Section 2
Obligations of a port holder

- (1) The port holder is responsible for the general planning and arrangements of occupational safety as well as the general safety and health of the working conditions and work environment in the port.
- (2) To reconcile the activities of employers and self-employed persons and to ensure the safety and health of those working in the port, the port holder must determine and assess the safety of the port area. In the determination and assessment, the hazards that other port work causes to loading and unloading and the arrangements relating to the storage of dangerous goods must be taken into account.
- (3) The port holder must draw up port safety instructions that include a description of the common principles of occupational safety and a description of traffic arrangements in the port area as well as codes of conduct in emergency and dangerous situations. Traffic arrangements

must be planned in an appropriate cooperation with the port users. Where necessary, special traffic instructions must be drawn up for the port.

- (4) If a major accident risk exists in relation to the port operations, the instructions must include directions for the prevention of the risk and for the codes of conduct in the event of an accident. The functionality of the safety instructions must be checked by practical training, if necessary.

Section 3

Duty to exercise care

- (1) When taking care of the safety and health of the employees, the employer must follow the instructions referred to in section 2 issued by the port holder. In their work, self-employed persons must follow the safety instructions issued by the port holder.
- (2) In the determination and assessment of hazards and risks at work, special attention must be paid to the movement, access routes, lone working and dangerous goods.

Section 4

Safety of common work phases

- (1) The employer responsible for loading or unloading, together with the ship's master, must ensure that each work phase can be carried out safely and that communication between the involved parties functions sufficiently well. Especially, it must be ensured that procedures in the event of interruptions and emergencies are safe and that changes in the work phases can immediately be reported to the ship's master. Where necessary, the key phases and procedures are written into a checklist that both parties confirm with their signatures.
- (2) Other work that causes loud noise, dust, fumes or other corresponding harm must not be carried out when loading or unloading work is under way.

Section 5

Initial inspection on board

- (1) The employer of loading and unloading work must, for his own part, inspect that access routes, emergency roads, working locations and technical appliances on board are in such a condition that work can be carried out safely. It must be checked from a certificate or some other reliable inspection report, which is in accordance with the international conventions, that the lifting equipment has been appropriately inspected.
- (2) A ship calling at the same port regularly must be re-inspected if factors affecting safety have essentially changed after the previous inspection. The appropriate functioning and reliability of the control and monitoring devices of the lifting appliances must be checked before each use.
- (3) Any observed deficiencies must be reported to the ship's master without delay. Work must not be started before the deficiencies endangering safety have been appropriately corrected.

Chapter 2

Provisions concerning work

Section 6
Signaller and waver

- (1) When the operator of a lifting appliance does not have a sufficiently good view of the load during the lifting, appropriate auxiliary devices or a signaller must be used. There must be a separate signaller for every uncoupled rope. The signaller's duty is to assist the operator of the lifting appliance in transferring the load and to warn other people about the dangers caused by the load.
- (2) When the visibility of the operator of a transfer appliance towards the travel direction is restricted or other people must be warned about the danger caused by the appliance for some other reason, a waver, equivalent to a signaller, must be assigned for the transfer appliance.
- (3) The signaller and the waver must not have other simultaneous duties that interfere with carrying out these duties. They must be equipped with a sign that clearly distinguishes them from other employees.

Section 7
Specific competence requirements for work performed with lifting and transfer appliances

- (1) The operator of a lifting appliance, the driver of a transfer appliance, the signaller, and the waver must have good eyesight and hearing as well as sufficient professional skills.
- (2) The operator of a port crane and a deck crane must have a relevant vocational diploma or an applicable part of such a diploma.

Section 8
Several work groups in the same working premises

- (1) If there are several work groups working through the same hatch opening or in the same working premises, it must be ensured by planning the work and the work environment that the groups can work without putting each other in danger.
- (2) When several work groups work simultaneously through the same hatch opening, there must be a vertical clearance of at least 3.5 metres and a horizontal clearance of at least 5 metres in the hatch opening per each work group.
- (3) When several lifting appliances are used, there must be a minimum clearance of 3.5 metres at both ends of the hatch opening and a minimum clearance of 10 metres elsewhere in the opening for each appliance. The horizontal clearance of a hatch opening must be at least 5 metres.

Section 9
Lifting persons

Notwithstanding the provisions on lifting persons in a goods lift laid down elsewhere than in the law, the operator of a transfer appliance is allowed to be in the appliance when it is lifted with a goods lift of a ship.

Section 10
Work at height

- (1) When working on top of a load exceeding the height of 1.5 metres or in other conditions that pose a risk of falling, the open edge must be protected or the risk of falling prevented in some other way.
- (2) A movable work platform, a man cage or personal fall protection equipment must be used when working on top of a container. For moving onto the first level of containers and away from it on a weather deck, an appropriate ladder supported from its upper end may be used.
- (3) For securing cargo on flat containers, roll trailers and other such appliances, firm work platforms equipped with safe access routes, rails, safety ropes or safety nets must be provided.

Chapter 3
Work environment

Section 11
Traffic arrangements

- (1) Traffic in the port area must be designed and arranged in a safe way. Traffic must not pose unnecessary risks to those working in the port. Unnecessary traffic in the port area must be prohibited and barred if needed.
- (2) Appropriate and safe parking areas must be arranged for the vehicles used in the port area.
- (3) Traffic routes for vehicles and work machinery as well as pedestrian walkways must be clearly signed and separated from each other if necessary. Where practicable, holding areas outside the loading and unloading areas must be arranged for vehicles visiting the port. Traffic must be one-way and crossroads must be avoided where practicable.

Section 12
Quays, storages, open areas and access routes

- (1) Quays, storages, open areas and access routes must be kept in a condition required for safe work. When moving especially heavy goods or appliances, the durability of the structures must be checked in advance.
- (2) There must be a clearance of at least 1.2 metres in the edge of the quay. No other solid structures except the equipment needed for anchoring the ship and a safety net may be present there.
- (3) A ramp leading from the quay to the ship must be closed with a visible barrier when the ramp is not in use.

Section 13
Container-handling areas and storage areas

- (1) A container-handling and storage area must be marked off and clearly signed in a port or in such a section of a port where a majority of freight traffic is container traffic. Factors relating to the handling of heavy and large-sized units must be taken into account in traffic arrangements and in the work. Occupational safety in the area must be ensured by monitoring, traffic arrangements or by some other effective means.
- (2) Unnecessary entry of outsiders to the container-handling and storage area must be prohibited and completely barred if necessary. Movement in the area is allowed only with permission from the management. Clearly signed areas must be assigned for loading and unloading of containers into or out of a vehicle or a train. Pedestrian traffic is allowed only in safe pedestrian walkways in these areas.

- (3) Employees must immediately be informed about changes concerning container-handling and storage areas.

Section 14
Access to the ship

- (1) Employees must have a safe access to and from the ship. When someone is using an access route, loads must not be lifted over it. There must be an appropriately fixed safety net under the access route that extends a minimum of 2 metres to the both sides of the lower end of the access route.
- (2) The ship's mooring permitting, a separate gangway must lead from a ro-ro ship to the shore.
- (3) Provisions on inspecting the safety and reliability of the access routes of the ship are laid down in section 5.

Section 15
Access to a lifting appliance

- (1) There must exist a safe access route to the cab of a crane and that of all other lifting appliances located in a quay in all those positions of the appliance where the access route is used.
- (2) If the access routes leading to the cab of a ship's crane cannot be safely used in all positions of the crane, there must be a safe access to the cab in the sea transport position and in the position where the crane is kept when external cargo-handling equipment is used. If the access route to the cab may be used only in the above-mentioned positions, entry to the cab in any other position must be barred. There must exist a safe exit from the cab in all positions of the crane.

Section 16
Crane cab

There must be good visibility from the crane cab to its area of operation. It must especially be ensured that ice build-up, water or dirt on the window does not obscure visibility. The cab must be heatable if necessary.

Section 17
Platforms for signallers

If the hatch coaming on the weather deck is so high that the signaller does not have an unrestricted view of the working area of the cargo shed, fixed or mountable platforms must be provided for the signaller at the hatch coaming or on the deck. The platforms must be equipped with a safety rail if necessary.

Section 18
Mooring a ship

- (1) The ship must be appropriately moored. The mooring lines must be undamaged and safe to use.
- (2) When ice is being removed from between the ship and the quay with screw propellers, special caution must be observed in work on the quay.

- (3) Cooperation of those participating in the mooring when ice is being removed must be ensured in advance.

Section 19

Lighting

- (1) Sufficient and adequate lighting must be provided in a port area, access routes, ships and in other work premises.
- (2) Lighting must not glare or otherwise obstruct the employees' vision.

Section 20

Ventilation

- (1) In cargo-handling premises and other work premises, there must be sufficient and adequate ventilation to remove substances that are dangerous or harmful to health and to ensure that breathing air includes a sufficient amount of oxygen.
- (2) If there is a reason to suspect that work premises do not contain enough oxygen for breathing or that there are explosive vapours, gases or a risk of toxication in the premises, the space must not be entered without appropriate personal protective equipment until it has been proved safe.
- (3) Before internal combustion engine-operated work machinery is used in cooled cargo spaces or other small confined spaces, the effectiveness of ventilation must be ensured.

Section 21

High-visibility clothing

When working and moving in the cargo-handling and traffic areas of a port area, high-visibility clothing bearing a CE marking must be used.

Section 22

Life-saving equipment

In the quay, there must be an orange lifebuoy equipped with a floating rope, a ladder equipped with a support bracket at its upper end, and a round-tipped boat hook at intervals of 100 metres or less. In the quay edge, in addition, there must be several fixed ladders leading up to the quay, painted in a highly visible colour and equipped with a handle on their upper end on the quay.

Chapter 4

Confirming the safety of equipment

Section 23

Safe working load

- (1) Before starting lifting work, it must be checked that the lifting appliance, its accessories, the goods lift and the lifting accessories as well as their load-bearing parts bear a clearly visible marking of the safe working load. The factor of safety for one-way loose gear must be at least four.

- (2) If the work is carried out with the assistance of coupled booms, the load must not exceed half of the safe working load of the boom with a smaller lifting capacity, unless the safe working load of the coupled booms is specifically marked on the booms.
- (3) Notwithstanding the provisions on the safe working load or restrictions on use of a transfer appliance laid down elsewhere than in the law, a rail wagon may be transferred with a forklift truck or some other transfer appliance if the transfer can be carried out safely.

Section 24

Joint lifting operations

A maximum of two lifting appliances may be used for a joint lifting operation. The lifting appliances of a ship may be used for a joint lifting operation only if the lifting appliances have been designed for joint lifting and there exists an appropriate scheme of it.

Section 25

Lifting rope

- (1) A rope may be used for lifting or lowering only if it is fit for purpose and flawless. There must exist an appropriate certificate of testing and inspection carried out in connection with the manufacture of steel cables.
- (2) When using a crane or a winch, there must always be at least three turns of rope on the drum.

Section 26

Periodic inspections

- (1) A trial with the maximum safe working load must be carried out for a crane that is in permanent use in a port. The trial must be carried out in connection with at least every other periodic inspection. Loose gear must be visually inspected at least once every three months.
- (2) Lifting accessories accompanying the load must be inspected before each use.

Section 27

Inspections that require dismantling and non-destructive inspections

- (1) Those assembly parts of lifting appliances that are prone to corrosion, wear and fatigue must be dismantled for inspection at least once every five years, unless they can be inspected in some other reliable way. Where necessary, non-destructive inspection methods must be used. Container spreaders and other accessories of a crane must be dismantled into such parts that their strength can be reliably inspected.
- (2) Equipment and assembly parts belonging to cargo booms must be dismantled for inspection at least once every five years.

Section 28

Competence of lifting appliance inspectors

- (1) Inspections of cranes used in ports are carried out by an expert community referred to in section 69 in Government Decision on the acquisition, safe use and inspection of machinery used at work and other work equipment. Periodic inspections of lifting appliances of a ship, inspections of cranes with a lifting capacity of 1,000 kilograms at the most, and inspections of

loader cranes with the capacity of less than 25 t/m may also be carried out by an expert referred to in section 70 in the above-mentioned Government Decision.

- (2) Lifting accessories may be inspected by a person who is authorised by the employer or the ship's master and who is sufficiently acquainted with the structure, use and inspection of the appliance. The inspector must be acquainted with the properties and the grounds for rejection of steel cables and of lifting accessories made of natural and synthetic fibres.

Chapter 5 **Dangerous goods**

Section 29 *Handling of dangerous goods*

- (1) When handling and storing dangerous goods, special care and caution must be observed. Before an employee handles dangerous goods or works in premises where dangerous goods are or have been stored, the employee must be informed about the risk factors and protective procedures relating to the handling. The instructions given in the markings on the dangerous goods must be taken into account when handling them. Handling of dangerous goods is prohibited unless they have been packed and marked appropriately.
- (2) Containers marked to be fumigated and containers suspected to contain fumigated cargo must be opened outdoors and ventilated before they are entered.

Section 30 *Storage of dangerous goods*

- (1) Dangerous goods must be stored in appropriate premises or in areas specifically reserved for them. In the storage, special attention must be paid to the synergism and careful segregation of dangerous goods. There must be an emergency shower in the storage.
- (2) When dangerous goods are temporarily stored in the port area, provisions concerning their transportation must be taken into account.

Section 31 *Written notification*

Before a consignor or a shipper delivers dangerous goods to a port area or well before a ship's master begins the unloading of the goods, they must issue a written notification of the dangerous goods to the port holder and to the employer responsible for the loading and unloading of the goods.

Section 32 *International rules of navigation*

- (1) Applicable parts of established rules observed in international navigation must be taken into account in loading and unloading of dangerous goods.
- (2) When handling dangerous goods at a workplace, such a person must be present that is familiar with the handling and emergency instructions that comply with the code of International Maritime Organization (IMO) and has the instructions at his disposal.

Chapter 6

Miscellaneous provisions

Section 33

Certificate and inspection report

- (1) A certificate shall be given of the inspection of lifting appliances and of the inspection of lifting accessories accompanying cargo on a ship. The certificate shall be in accordance with the international conventions. The certificate used in the assessment of safety must be reliable and appropriately verified.
- (2) The name of the inspector, the conclusions of the inspection, and the maximum proof load must be written down in the certificate or other inspection report of a lifting appliance.

Section 34

Exemption order

The relevant occupational safety and health authority may allow exceptions to the provisions of this Decree in individual cases for special reasons, provided that other measures have been taken to ensure the safety of employees.

Section 35

Entry into force

- (1) This Decree enters into force on 1 January 2005.
- (2) This Decree repeals the Government Decision of 28 November 1985 on regulations for loading and unloading of ships (915/1985), as amended, and the Government Decision of 18 September 1986 on applying the regulations for loading and unloading of ships to certain ports (682/1986).